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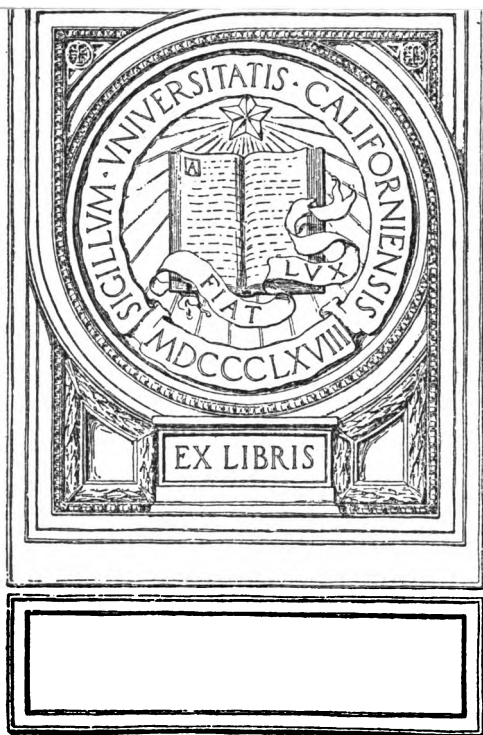
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THE YOUNG MAN AND HIS VOCATION

FRANKLIN STEWART HARRIS



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BY

FRANKLIN STEWART HARRIS, PH.D.

*Professor of Agronomy and Director of the School of Agricultural
Engineering and Mechanic Arts, Utah Agricultural College,
and Director of Utah Agricultural Experiment Station*



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DEDICATED TO THE YOUNG MEN OF TO-DAY,

WHO WILL BE THE WORKERS OF TO-MORROW.

*with the conviction that educating
and training the present rising gen-
eration will result in bettering the
industrial conditions of the future.*

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PREFACE

THERE is a tremendous waste in the world due to the fact that many of the workers have not found the vocation for which they are adapted and are not trained in the work they are doing. If by some means the forty million individuals in the United States who are engaged in gainful occupations could be transferred to the kind of work for which they are suited and could have the proper training for that work, the annual addition of wealth to the nation would be almost beyond computation. If the earning capacity of each individual were increased by ten cents a day, more than a billion dollars would be added to the earnings of the workers each year.

It is obviously impossible to completely readjust those of mature years who are already settled in their occupations; the relief must come through the young people whose careers are before them. Each year sees an army of young men entering the industrial field as wage earners. Why can not these be so directed in their choice of vocations and in training themselves for their work, that part of the great wastage of youth will be discontinued?

This little volume was written as an aid to young men who are anxious to make the most out of their lives. An attempt has been made to present in simple language a view of the opportunities in the leading occupations, and to show the personal requirements and training desirable for those entering each of these occupations. The young man is conducted through the apartment house of life and allowed to examine each of the rooms. The price to be paid for living in each is explained. After the examination is over an opportunity is given to choose the place where he will spend his life. Too many young men who do not have a guide settle down in the first room they come to without knowing what else is available. Probably some other room would suit them better if they only knew.

In Part II a number of chapters are given to assist the young man in choosing from the vocations discussed in Part I, and also to give him the proper attitude toward his work regardless of the occupation he may select.

If only a few young men are helped by these pages to find greater happiness and efficiency in their work the author will feel repaid for any effort he has put forth.

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PART I
THE VOCATIONS

“Blessed is he that has found his work! Let him ask no other blessedness.”—Carlyle.

“A parent who does not teach his child a trade teaches him to be a thief.”—Brahmanical Scriptures.

The Young Man and His Vocation

CHAPTER I

THE NEED OF VOCATIONS

Undivided Work.—In the days when men's activities were not complex as they now are, it was not difficult for a single individual to do any of the work necessary to provide comfort for himself and those dependent on him. The people who lived in northern and central Europe fifteen hundred or two thousand years ago were simple in their lives; they had no large cities, but lived in small communities or as families scattered over the land. Every man could hunt, till the soil, build a house, or do whatever else that contributed to his welfare. Specialization was not necessary since there was no great competition, and people could live almost independent of one another. Under these conditions it was a matter of pride that a man could do anything, and a person who knew how to do but one thing was held in contempt.

This condition is found to-day in many of the

less civilized countries of the world. There is little difference in the work done by the various members of an Indian village existing in its native state; about the only division of labor is based on sex or age. Certain kinds of hard work are considered beneath the dignity of the men, and must be done by the women.

Modern Society Complex.—The numerous inventions made during the last century have absolutely revolutionized methods of living, especially in centers of population. With the utilization of steam as power, it became possible to travel in a few days distances that had previously required months; and the telegraph and telephone have entirely changed methods of communication. Modern machinery renders easy tasks that were utterly impossible when hand labor was used. The discoveries made in the fields of physics, chemistry, and biology have completely changed most of the old industries, and have made possible many new ones. These discoveries have also changed the methods of living, of preserving health, and of fighting diseases.

Under modern conditions more people can enjoy the comforts and luxuries of life than formerly. Education is much more general and the average individual has greater opportunity to travel and to learn than ever before in the history of the world.

The Division of Labor.—This complex condition has made necessary the division of labor. One man

can no longer do all the kinds of work that are to be done in a single community; specialists must be developed. Where great competition is encountered, division of labor reaches its highest point. In a small village a man may transact a number of kinds of business. He may keep the postoffice; his business may include merchandising and banking; and he may also run a farm. As the volume of trade increases and competition becomes greater, he must eliminate certain phases of his business and pay greater attention to others. He may drop the postoffice, then the bank and confine himself to selling merchandise; later, he may even need to divide his store and specialize on drugs, shoes, groceries, or dry goods.

The jack-of-all trades is usually not a prosperous individual. It is better for him to centralize his ability rather than to spread his energies over too wide a field. One workman said he could make anything but a living. This is often the case where a tradesman tries to do a little work in every trade without being master of any. There may have been, and probably still is, a demand for a few individuals who are handy at all kinds of jobs, but such persons as a rule receive only scant pay.

There are at least three good reasons for a division of labor. First, much greater proficiency can be obtained if a person studies thoroughly one subject, or does one kind of work. The individual

who endeavors to do legal work, practise medicine, run a farm, sell merchandise and build his own house would probably know but little about doing any one of them. In these days so much is known about each business and profession that a person finds difficulty in mastering one of them without trying to learn all about a number. A second reason for dividing the work of the world is that people differ in their dispositions and natural abilities. Some are suited to do one kind of work, while others can do something else better. One is gifted in music or art, another takes naturally to business, while a third is interested in machinery. Thus, by dividing the activities each man may do the work for which he is best suited. The fact that a person can spend his time more economically when not trying to do too many kinds of work may be considered a third reason for a division of labor. Even if all had the same natural ability and training, it would still be advisable to divide the occupations. A person who spent a few hours working in a field, a few more working in a factory, and the rest of the day handling money in a bank, would waste most of his energy in changing from one thing to the other. It is better, therefore, to have the work of men divided into groups, in order that each person may have a vocation, or life's work, at which he spends the greater part of his working hours.

"The man of to-day," says Edward Bok, in his

lecture entitled "KEYS TO SUCCESS," "who has to do with the employment of men witnesses no sadder sight than the procession of unemployed men that are exemplary in life, have some general intelligence, are respectably honest and frequently of good social position, and yet who can get only menial, routine, poorly-paid positions. The reason for this is that they have no definite knowledge, no special experience. They can do 'almost anything,' they say, which really means that they can do nothing. The successful man of to-day is he who knows how to do one thing better than most other men can do it."

Dangers of Overspecialization.—A danger may be found in dividing work to such an extent that men become mere machines. Especially is this the case in manufacturing establishments, where each person has just one thing to do hour after hour, day after day, and year after year. His work may be the turning of a lever on some machine, or it may be the finishing of some part of the commercial article.

While high specialization leads to great skill, it may not be the best thing for an individual, as mere routine work done year after year tends to make one narrow in his view and non-sympathetic with his fellows. Where one is compelled to do the same work continually, he should take up some avocation during his spare time. He is not justi-

fied in doing any kind of work that will make of him a mere beast of burden, and he cannot afford to lose sympathy with those doing work different from his own. In justice to himself he should keep in touch with other men's work, as well as becoming a master in his own vocation.

Persons who have been trained to do but one thing, and who are ignorant of every other kind of work, may find themselves greatly handicapped when forced to leave their chosen field. The scholar who knew nothing of practical affairs would find it difficult to make a living if compelled to give up his books on account of failing eyesight. The old saying that a person should know a little about everything and everything about some one thing is probably very near the truth.

CHAPTER II

CLASSIFICATION OF MAN'S ACTIVITIES

Industrial Changes.—Any classification that can be made of the work of mankind must be somewhat temporary since there is a constant shift and readjustment of the entire order of business. New industries spring up and old ones are discontinued. At one time a certain profession will be in great demand, while in a few years the need for it may be considerably lessened.

At present the relative number of people engaged in the various kinds of work is entirely different from what it was a century ago. The building of railroads and steamship lines has completely transformed industrial conditions in almost every part of the world. With the invention of better farm machinery and the discovery of the principles of scientific agriculture, it is not necessary for so great a percentage of the people to spend their time producing the food required by mankind as it formerly was. When the land was tilled with a forked stick plow, and when all planting, harvesting, and thresh-

ing had to be done by hand, a person could produce only a fraction of what can now be produced when steam power, operating large machines, is made to do practically all the work.

With the discovery of methods of producing indigo artificially, the dye industry was transferred from agriculture to manufacturing. The invention of the telegraph and the telephone has furnished a new occupation for hundreds of thousands of People. Even with the comparatively advanced stage of science and invention of to-day, it is probable that during the next century almost a complete change will occur in many phases of the work of mankind.

Methods of Classifying Voactions.—The grouping of vocations may be done from so many stand-points that it is difficult to get an entirely satisfactory classification. Such terms as “the professions,” “the trades,” etc., have been considerably used but they are often misleading.

Work is often grouped as physical or mental, depending on whether the body or the mind has to put forth the greater effort. Most vocations call for the use of both physical and mental energy, but the relative amount of each varies. The amount of work done by the coal miner will depend largely on his physical strength and how well his muscles are trained. The writing done by the author, on the other hand, demands great mental activity with comparatively little muscular exertion.

A lack of sympathy often exists between those working with their hands and those working with their heads. Persons doing physical labor sometimes think those engaged in sedentary occupations do not work at all. On the other hand, physical work is sometimes looked down on by those engaged in the more intellectual pursuits. As a matter of fact, both types of work require energy, and they are both necessary to the well-being of mankind. It is probable, however, that ability to do good mental work is more rare than that to do manual labor, and by the law of supply and demand it brings greater remuneration.

Many people are satisfied to be mere "hewers of wood and drawers of water" rather than to put forth the extra effort necessary to prepare themselves for the more difficult tasks of life; as a result, there is great competition for the work of "hewing and drawing" with a consequent relatively low compensation.

Vocations are sometimes classified according to the amount of training required in preparation. In order for a person to begin work as a chemist or surgeon, considerable preparation is necessary, while there are some vocations that can be taken up with comparatively little special training. The amount of capital required is often used as a basis for classification. Banking, farming, merchandising, and railroading all require considerable money in

addition to training. Teaching, law, medicine, and the trades can be practised with very little capital in addition to ability to do the right kind of work.

The various activities of man are grouped according to whether they are directly or indirectly productive. Agriculture furnishes food and clothing, while teaching is more indirect in its benefits to man. Some people are prone to look with disfavor on any occupation that is not a primary producer; but it is just as necessary in fishing to have the line connecting the hook with the hand as to have the hook which does the real catching.

The classification of vocations according to their effect on the worker is one that should be given considerable attention, particularly by those who are choosing a life's work; some occupations undermine the health, and others are known not to improve the morals. Careful consideration should be given to these questions in making a study of vocations.

Too often in the minds of young people vocations are classified entirely on the basis of the immediate returns in money. Due attention is not paid to the ultimate effects on the welfare and happiness of the individual or to the service that can be rendered. The "soft snap" jobs that pay well are in demand regardless of their desirability as a life's work.

Various Methods of Getting a Living.—The work done by people is usually directly or indirectly connected with the earning of a livelihood. It is rare for a person to spend the greater part of his time in activities that do not contribute to his means of satisfying the material wants of himself and those dependent on him.

Professor Carver has made the following classification of ways of getting a living:

I. *Uneconomical.*

A. Destructive.

1. War.
2. Piracy.
3. Plunder.
4. Swindling.
5. Counterfeiting.
6. Adulteration of Goods.
7. Monopolizing.

B. Neutral.

1. Marrying Wealth.
2. Inheriting Wealth.
3. Benefiting through a rise in land values.

II. *Economical.*

A. Primary.

1. Farming.
2. Mining.
3. Hunting.
4. Fishing.
5. Lumbering.

B. Secondary Industries.

1. Manufacturing.
2. Transporting.
3. Storing.
4. Merchandising.

C. Personal or Professional Service.

1. Healing.
2. Teaching.
3. Inspiring.
4. Governing.
5. Amusing.

Parsons classified the industries into the following general groups:

1. Agencies and Office Work.
2. Agricultural.

3. Artistic.
4. Commercial.
5. Domestic and Personal Service.
6. Fishing.
7. Manufacturing.
8. Mechanical Building and Construction.
9. Professional and Semi-professional.
10. Miscellaneous industries.

Number Engaged in Various Pursuits.—There were in the United States in 1910, according to the thirteenth census, 38,167,336 persons ten years and over engaged in the various occupations. Of these, 12,659,203, or about one-third, were following agricultural pursuits.

In the group classed under professional service there were 1,663,569 persons. Some of the important divisions of this group were:

Teachers.....	599,237
Physicians and surgeons.....	151,132
Musicians and teachers of music.	139,310
Clergymen.....	118,018
Lawyers.....	114,704
Civil mining engineers, and surveyors.....	58,963
Artists, sculptors, and art teachers.....	34,104
Actors.....	28,297

There were 3,772,174 persons engaged in domestic and personal service, and 1,737,053 engaged in clerical occupations, including bookkeepers, typewriters, etc.

In the group classed as manufacturing and mechanical industries, there were 10,658,881 persons engaged; there were 2,637,671 engaged in transportation activities, and 3,614,670 in trade.

These figures show the great majority of workers to be engaged in agriculture, manufacturing and the mechanical industries, and commerce, with only about 4 per cent, in what is called professional service. Most of the young men of the country will, therefore, have to find employment in one of the major groups.

CHAPTER III

AGRICULTURE

Definition.—Agriculture may be defined as the art, the science, and the business of producing plants and animals for economic purposes. It is an art, since the successful doing of farm work requires skill and practise. A person who has never done this kind of work is very awkward indeed when he makes the first attempt. The boy who is raised on a farm acquires so naturally the knack of milking cows, handling horses, plowing, and irrigating, that he considers these things to need no particular skill. It is only necessary, however, to see the difficulty with which farm work is done by an unpractised person to realize that good farming is an art.

Modern agriculture is a science, because the best methods cannot be followed without understanding the scientific principles underlying the operations on the farm. In the old days when but little was known about the laws governing the growth of plants and animals, and when the real function of the soil was not understood, farming was largely a matter of tradition, the reasons for tilling the soil

or handling crops in a certain manner not being known. Books on agriculture did not attempt to explain principles, but merely laid down rules. Under such conditions, there was but little in agriculture that could be called "science." With the newer discoveries, however, the *reason* assumed as much importance as the *operation*, till the present-day farmer wants to know "the why" for everything he does. Under these conditions it becomes impossible for the farmer who works by rule alone to compete successfully.

Farming is primarily a business, since its chief purpose is the making of a living. A few men may be interested in agriculture just as a pastime, but the great majority of those who till the soil do it as a means of gaining a livelihood. Considerable effort is being made the last few years to place farming on a thorough business basis. Cost accounting is being applied to the various farm enterprises in order to eliminate the ones giving smallest returns, and greater care is being given to buying supplies and to selling products.

Divisions of Agriculture.—Agriculture has many branches, but it is usually divided into three main classes: animal husbandry, which deals with the various branches of the livestock industry; agronomy, which deals with the production of field crops and the tillage of the soil; and horticulture, which treats of fruits, vegetable gardens, and flowers.

This classification is not used in practical farming, but is made to simplify the study of agriculture. Almost every farm combines the three classes. Even if a farmer is specializing in livestock, he raises crops to feed them, and he usually has a few trees and shrubs and a garden.

High specialization in farming rarely pays except under special conditions, since it is much easier to use farm labor, horses, and machinery economically with diversified, than with specialized farming.

Personal Qualities Desirable.—The statement has been made that any one who can do nothing else may become a farmer. This may have been at one time, but it certainly will not hold to-day. The problems that arise in connection with the management of a farm are so numerous and varied that the highest type of intelligence is required to properly solve them. There are so many changing conditions of soil, weather, crops, animals, and markets that good judgment must be constantly exercised. This calls for a high type of native intelligence as well as experience and training. A person with less than average ability can find much better employment in a city working on the streets, or in a factory where the tasks are simple and supervision close, than on a farm where each man has to do various kinds of work without being watched. There is no permanent work on the farm where ability of a low order can be used profitably, even at a small wage.

A back-to-the-land movement which has for its aim the placing of inferior people from the city slums on the land and making farmers of them is not well founded and can never be successful. These people are better off in the city where they can find employment commensurate with their ability.

To be a farmer a person should be a naturalist by instinct; he should enjoy being in the open; and should find pleasure in tilling the soil, handling animals, and watching crops grow. If he can find no interest in these things; if the flowers, the birds, the green grass, and the babbling brook do not appeal to him, and he wants to get away from them all, he would better choose some vocation other than farming.

In this day of machinery the farmer should be, by nature, mechanical. He should not mind handling machinery, and should know how to locate trouble in a machine and have the ability to fix it.

A farmer should have a strong body and be able to do hard physical work. But few farms require the services of an overseer who does no manual labor. This, taken with the fact that farm hands do much more efficient work if the manager works with them, makes it almost imperative for every farmer to have a robust physical constitution.

Since the income of the farm is made by selling its products, and since there are many business trans-

actions necessary in purchasing supplies, hiring help, and doing other things, the farmer must have the ability to conduct business affairs. A man may have exceptional ability in raising crops and managing animals, but if he is unable to transact business he will be a failure as a farmer. Such a person should engage in a vocation where he can receive definite pay for his services, in order that he may have the minimum of business to transact.

Preparation Necessary for Agriculture.—Farming can be practised with as little technical training as any vocation; but there are few vocations where proper training will pay higher dividends. It used to be said that the only place to learn farming was on the farm. This was doubtless true when the entire knowledge concerning agriculture was couched in a few dogmatic rules. The art of farming must be learned by practise on the farm; but the science of agriculture, which treats of the principles underlying farm practise, is learned in the laboratory and from books. Much can also be learned of business methods away from the farm; hence, it is not true that the farm is the only place to learn agriculture.

For more than half a century special courses in agriculture have been given in many of the schools. These courses were at first confined almost entirely to special technical institutions, but in later years other schools have introduced agricultural instruction. During the last decade agriculture has been

introduced into many of the primary and secondary schools in rural districts.

As far as possible every prospective farmer should take some school work in agriculture; in fact, it would be very desirable for him to have a complete agricultural course. In this course he should get a good general knowledge of the sciences, besides taking the more practical side of the work. He could specialize in his studies on the branch of agriculture he expects to follow, in addition to getting a broad view of the entire subject.

A study was made by Warren in New York State to see the effect of education on the profits made by the farmers. Those who had attended only the district school made, on the average, a labor income of \$318 a year; those who had attended high school had a labor income of \$622; while those who had attended more than high school secured a labor income of \$847, or nearly three times as much as those who had received no education above the grades.

While it may appear to the casual observer that no particular preparation is necessary to become a farmer, experience has demonstrated the great advantage of a preliminary training.

The Effect on the Individual.—Agriculture, like every other vocation, has its definite effects on those who follow it. Since the farmer does not have the opportunity to associate with his fellows so much

as do those engaged in some of the other occupations, his life is, of necessity, somewhat solitary. As a result, he may appear at a disadvantage in a social way; he is primarily a doer rather than a talker.

His contact with the stern realities of nature makes him conservative and careful, develops in him good judgment in practical matters. He does not always keep up on the latest thought of the world; but he usually develops a philosophy of life that is wholesome and optimistic.

Farm life tends to develop the sterner virtues, such as honesty, frugality, temperance, and morality, even if it does not always stimulate brilliancy. The real is held in high esteem, while the superficial is looked on with disdain.

The open-air life of the farmer gives him a vigorous constitution. His ailments are usually due to exposure, overwork, or poor sanitary conditions rather than to lack of vigor.

One of the desirable things about farming is that in many respects the farm offers a good place in which to rear a family. Aside from the isolation and the difficulty of getting good schools, conditions are almost ideal. There is an opportunity for a good healthy growth of the child's body, a freedom from temptations encountered in city streets, and a chance for him to learn how to work by his parent's side.

Compensation in Agriculture.—When measured in actual money, the earnings of the men engaged in agriculture are usually low in comparison with salaries sometimes paid in cities. The annual labor income of the average farmer in the United States is less than \$1,000, whereas a salary of this amount would be considered rather low for many kinds of work. Notwithstanding this apparently low income, the farmer is probably more independent financially than the workers in any other field. His expenses are low and he has a splendid opportunity to invest his savings where they will bring good returns. The farm furnishes much of the family living, and the demand for money is less than where everything has to be purchased from the outside.

Wages of farm hands seem to be low, but the farm laborer who is careful can save a snug sum each year. This condition is well illustrated by two brothers who started out together. One went to the city and secured work as clerk in a store where he finally received \$75 a month. The other found employment on a farm at \$40 a month and board. In their correspondence the one who was earning the larger amount called the other a fool for working for such low wages and tried to entice him to the city, where he could get pay that was worth while. At the end of two years both boys returned home to spend Christmas. The store clerk borrowed \$50 of his farmer brother to pay for a dress

suit for which he had gone in debt. He had saved nothing from his wages. The other brother, besides having the \$50 to lend, had bought a number of heifer calves which would soon be cows; he had invested \$300 in land, and, in addition, had money in the bank.

Very few fortunes are made by farming, but it is usually possible to get a good living and save something in addition. A few men have made large sums of money in agriculture; many simply eke out a miserable existence; but the great majority of those who till the soil live in comfort and are, in a large measure, independent.

Opportunities in Agriculture.—Every grade of farmer may be found from the one producing but a few acres of crops, of inferior quality, for which he receives scarcely enough to keep body and soul together, to the one who produces the best crops and animals for which he receives thousands of dollars each year. The class to which any individual belongs depends on his ability and on conditions. Some could not succeed at farming even under the most favorable conditions; likewise there are circumstances in which farming is practised where no one could succeed.

In general, the opportunities offered by agriculture are good. The young man of energy and good judgment can find a field for the exercise of all his abilities. There is a chance for him to serve his

fellows by developing better strains of plants or animals and by improving agricultural methods. He can use his executive ability to good advantage in organizing his business, and he can use all his studious tendencies in learning the scientific principles underlying his vocation.

The young man who is in great haste to leave the farm because it offers no opportunities, is either ignorant of the real possibilities or he has some unwarranted prejudice. No particular inducements are offered by the farm to the man of low intelligence who has been raised in city slums, but the intelligent young man of the country who is willing to learn modern methods, need not look with disdain on the opportunities offered by agriculture.

How to Begin Farming.—The method of getting started in the farming business depends entirely on conditions. In a new region where there is plenty of land, all that the young man has to do is to go out and take up a farm from the public domain, or purchase it at a low price, usually on long-time payments. Localities where land can be obtained so easily are rapidly decreasing, and it is each year becoming more difficult for a man without means to begin farming.

Many farmers with families have looked ahead and have secured sufficient land to give each son a farm. Sometimes there is but one son in the family who wishes to be a farmer, the others prefer-

ring to follow some other vocation. In both of these cases it is easy to follow agriculture, since the land is inherited.

Farming is a business that cannot be conducted without capital; hence, it is difficult for a young man who does not inherit a farm to begin without some kind of help. One way to get started is to rent land, and gradually work into ownership. Another way is for the young man to teach school or do some other work until he has saved sufficient money to begin farming.

If a man has had no experience on a farm, it is usually unwise for him to attempt to run a farm of his own at once even though he may have studied agriculture in school. Many things about farming must be acquired by experience, and this experience can be gained much more cheaply as a hired farm hand than as a manager. The most important work of the prospective farmer is for him to get an education; then after having some practical farm experience, he is ready to begin operations on his own farm.

CHAPTER IV

THE TRADES

Definition.—Many kinds of work can be classed under the general title of the trades. It is impossible to draw sharp lines, since the trades merge into the work of the artist, designer, and manufacturer on the one side and into the field of the unskilled laborer on the other. The work of the tradesman requires special skill and cannot be well done without a certain amount of training. This work may include the activities of the carpenter, mason, painter, plasterer, plumber, paper hanger, etc., in building; or that of the blacksmith, machinist, shoemaker, printer, tailor, etc., in manufacturing and other industries.

Importance of the Trades.—The importance of the man who does the skilled work of the world cannot be overestimated. About one-fifth of all those employed in gainful occupations in the United States are working at what may be classed as trades. This portion of the world's workers put into operation the discoveries that contribute to the conveniences and necessities of modern life.

The machinist has, with the aid of his machinery, completely revolutionized every field of human endeavor. He has entirely changed the methods of agriculture, manufacturing, mining, and all of the other industries.

Thus activities of modern society are based on the efficient service of a vast army of men and women who are skilled in the various arts and crafts of the day. All of the industries must depend on trained men to do the work necessary for their operation.

Personal Qualities for Tradesmen.—Many qualities are desirable in those entering the field of the skilled workman. This field requires a strong, healthy body and demands of those entering it that they shall not be afraid of hard work. The tradesman should be able to get along with other workmen and be willing to be directed by others; he should have intelligence and originality in order that he may be more than a mere machine in his work.

Each trade makes its own special demands. For example, a machinist should naturally like to work with machinery and take an interest in its operations. He should be a close observer and should have a good idea of form, size, and weight, as well as being constructive in his nature.

The interest manifested by different individuals in the mechanical pursuits is illustrated by two brothers,

who, though raised together, were not at all alike in their tastes. One knew all about each machine on the place, and he noticed closely every new mechanical device. During his spare hours he was making things, and he spent a great deal of time taking machines apart and putting them together again. The other brother knew practically nothing about machines and cared less. He was interested in livestock and would never let a horse or cow pass unobserved. He was helpless if anything went wrong with any simple machine he was using. He would ride a number of miles for help rather than investigate the trouble. As these brothers were traveling through the country, the train stopped at a small station where stock were being loaded into the cars. The brothers got off the train to walk for a few minutes. The one walked forward to the engine and spent his time looking it over, examining wheels, cogs, and pistons; the other spent all his time looking at the animals that were being loaded. The one had in him the qualities of a machinist; the other would probably have found it very difficult to make a success in the use of any kind of tool.

Learning a Trade.—A generation or two ago practically all trades were learned by apprenticeship. Boys were put to work with a master of some trade, and there they had to remain for as long as was necessary to make them skilled. Usually a cer-

tain number of years were specified in the contract. The apprentice received a very low wage during part or all of the period of learning.

During the last few years industrial schools have been established and many young men are taking advantage of them to learn trades. The time required in schools is usually much shorter than that required in the old system of apprenticeship, since the student spends all his time learning new things and does not attempt to earn money while studying. It is often necessary for graduates of industrial schools to have some practical experience after leaving school before they become master workmen.

One of the best ways for a young man to learn a trade to-day is to attend a school where instruction is given in the desired subject. He can acquire some knowledge of the trade during the school year while getting his general education; then, during vacations, he can work with a practical tradesman. In this way he should be able to go out as a workman by the time he has finished his schooling.

It is impossible to find schools for all the trades; hence, in many cases, it is necessary to learn them by working with some practical tradesman. The disadvantage of this method is the length of time required. In a particular shop most of the work may be of but one or two kinds, which does not give the young man the desirable breadth of knowledge concerning the trade he is learning.

In this day of hurry and bustle the young man may become impatient to get into practise; but the master workman cannot be made without long experience. On learning a trade, thoroughness should be placed first. No young man should be satisfied with anything short of mastery.

Effects on Individual.—Working at the trades usually promotes regularity of habits and stability of character. Honesty and precision should naturally grow out of the work. As there is a tendency on the part of the individual to become dependent on others after having his labors directed for a time, he may lose a part of his initiative.

There is a danger that the tradesman will become somewhat narrow mentally, although it does not follow that he will need to be so. His work confines him in a restricted field, and in order to keep his sympathies broad, he should do considerable general reading, and should associate with those engaged in other pursuits.

Some trades, if followed too closely, tend to make the body misshapen. Exercise of the right kind may largely overcome this. Some trades are conducive to good health, while others have the opposite effect.

The Tradesman's Pay.—The wages received by skilled workmen are decidedly in advance of those paid to common laborers. The class of work and the hours are usually also more desirable. The

amount received for work in the different trades and under different conditions varies so much that it is useless to attempt to give exact figures. The saying that "a man who has a trade has a fortune" is true in the sense that he can always make a good living under normal conditions. There is always a demand for men who can do special work particularly well, even when common laborers are out of employment.

If the man with a trade can make two dollars a day more than the unskilled worker, he will make six hundred dollars a year more if there are three hundred working days. Six hundred dollars is interest on twelve thousand dollars at five per cent. This means that the trade would be worth twelve thousand dollars to its possessor. While great fortunes are probably never made in the ordinary practise of a trade, a good honest income is fairly certain.

"An ordinary clerk," writes Wingate, "is not so well paid as a first-class mechanic. He has far less independence, and not half so good prospects. The mechanic's work is more healthful; he is less likely to lose his place in dull times, is only discharged from necessity, and has equal chances for promotion. The average clerk does not require special ability; but the mechanic must be intelligent, and, if he is industrious and observing, he improves daily. A mechanic with a kit of tools and enough money to

hire a basement or a loft may start on his own account or he may work at home. If he has energy and friends he will have little trouble to get along. I believe that more mechanics than clerks own their homes; and, when they die, they leave their families better provided for."

Opportunities Open to Tradesmen.—The opportunities open to the man with a trade are largely dependent on his energy and ambition. He may be satisfied to do just an ordinary grade of work and receive medium pay, or he may be determined to rise to the top of his trade and command the highest compensation. In almost all of the trades there is an opportunity for advancement. The carpenter may, through study and industry, become a contractor and later an architect. The boy who learns to be a printer may become a compositor, an editor, or an author.

It is within the trade itself and not in the shifting to another business that the great majority should look for their advancement. It is a great thing to be able to do the important work of the world with one's own hands, and especially to do some one thing better than any one else. Those who do the work are worthy of the highest respect and reward; and to be a master workman in some field is an ambition worthy to burn in the heart of the most promising young man.

Infinite opportunities are open to the mechanic

in developing new machines to meet the demands of an ever-advancing civilization; and there is original work growing out of most of the trades that calls for the highest type of inventive genius.

What Trade to Learn.—The conditions in which a person finds himself, the law of supply and demand, his natural likings and ability, and a number of other things must help him to determine the trade to learn. Most of the ordinary trades are in demand in the well-settled communities; but in a newly settled region it would be unwise to learn a trade for which there would be no call, unless a person were willing to change his home. It would probably be unwise to take up a trade that is already overcrowded. There is always room at the top, but it is more difficult to get to the top under some conditions than under others.

Probably the greatest thing to consider in deciding on a trade is a person's tastes and natural ability. Benjamin Franklin, telling of how his father wanted to help him, said, "He therefore sometimes took me to walk with him and see joiners, bricklayers, turners, braziers, etc., at their work, that he might observe my inclination, and endeavor to fix it on some trade or other on land." In deciding on a trade, it is a good thing to follow this method. Examine all that are available and if other things are favorable, take the one toward which you are naturally inclined.

CHAPTER V

BUSINESS

Scope of Business.—Business may be not only a vocation in itself, but it necessarily enters into every other vocation and industry in the world. Agriculture, mining, manufacturing, law, medicine, engineering, teaching, etc., all have their business phases; and those who engage in these various occupations must know something of its transactions. So important has commerce become to the welfare of mankind that the transaction of its affairs has called for the entire time of a great body of workers. It has been found necessary to organize commerce into its various branches for convenience in operating. As a result, a great many business vocations have been developed.

It is impossible for a nation to make any great advances in civilization if it devotes itself entirely to simple production without the idea of exchange. It would be unwise to produce all the commodities required by a community right at home. Each region, by its special conditions, can produce some

things better than others. While the agencies of business are probably not so essential as agriculture in supplying the absolute necessities of man, the development of civilization and the supplying of modern comforts would be impossible without commerce.

Honesty in Business.—In letters from a great many prominent business men regarding desirable qualities of those engaged in business, practically every correspondent placed honesty at the head of the list. This was not a matter of chance. The answer rested on a basic principle that has been proved by centuries of experience. Honesty is, if possible, more necessary in business than in many of the other walks of life, since commerce is based primarily on confidence.

Many false schemes are forced onto the business world, and many unprincipled men engage in commerce; but business in the main must be conducted "on the square" or it will not be successful. Some people have the idea that if they are cunning they do not need to be honest, but their deception is usually discovered. This is illustrated by the story of two boys who lived in a small town. Both were very anxious to get a position in the town store, as it offered splendid opportunities for advancement. The merchant had both of the boys help him once in a while, but did not decide which one to employ regularly. He gave each of them a book, which he

said he would be glad to have read. After a week or two he asked the boys if they had read the book. One said he had only found time to read one chapter. The other boy, wanting to create a good impression, said he had read his book through a number of times. He praised it in the highest terms, and said that each evening before going to bed he spent some time studying its contents. This of course pleased the merchant, and he thought he was ready to decide on his man. He went to the home of the boy to acquaint his parents with the opportunities he was going to offer their son, and was shown into the parlor to wait a few minutes. Here he found lying on the table the book he had given. To his great astonishment the leaves of the book had never been cut. When the parents came in he simply told them he would never be able to use their son again.

The young man who expects to enter a business career should have as the most deeply-set corner stone in his entire foundation, a determination to be absolutely honest. If he does this, the structure he may rear will be safe when the storms of life come. The author was very much impressed on one occasion by a conversation between the mother of a young man and his employer. In talking about how the young man was getting along, the employer said: "Madam, your son is absolutely honest in all he does. I would trust everything I have in the

world to his truthfulness." Tears filled the mother's eyes as she said, "Your words make me the most happy woman in all the world."

Training for Business.—There are a number of ways in which a young man may prepare himself for a business career. It is indispensable for him to have at least a general education, in order that he may be able to meet others intelligently. A high school and college training are becoming more and more necessary. Many men who have had but little school training have been very successful in business; but as competition becomes keener, this is more difficult to do. The few extra years spent in getting an education will bring big returns when the time comes to face the stern realities of life.

In learning the technical side of business, there is probably no better way than to work up in the business itself. Many successful men have started as office boy and filled the various positions up to manager or superintendent. In some kinds of business it takes nearly a lifetime of struggle from department to department before the top is reached.

In this day of schools for everything, the business college has developed along very practical lines, and the young man who expects to make some phase of commerce his vocation would do well to take a course in a business college. This would not altogether do away with the necessity for him to work up, but it would put him in a position to advance

much more rapidly than if he had to learn every principle through the slow school of experience.

Each kind of business in addition to general training has special demands which it makes of those preparing to enter it. In railroading, for example, there are numerous departments; and the training is different for each. Some, indeed, are entirely out of the realm of business, but come under the technical subjects.

Getting a Start.—Those who are pessimistic often say that it is impossible to get into anything these days without a pull. As a matter of fact, the world has never been more willing than to-day to have a person pass on his merits. It is true that friends are a good thing for any person to have, and they may help him to get an opportunity to prove himself; but unless he can “deliver the goods,” all the pull in the world will not make him a success.

Some young men are continually talking about “getting in right” and other things that have nothing to do with real merit. If they spend the time in real preparation that they waste in trying to “line things up,” they would not need to worry so much about hard times and the unkindness of the world.

A young man was very anxious to become a member of the Cornell rowing crew. He tried to use his friends to get a “pull for him,” thinking this would do more than tiresome practise. When the matter came to the attention of coach Courtney,

who had not lost a race for years, he simply remarked that the only pull a man could get on the Cornell rowing crew was the pull he had at the end of the oar.

In business the only "pull" that amounts to anything is the work that can be done. The employer is not so much interested in family connections, the people one has met, or the books one has read, as in ability to do work. In getting a start in business, the principal thing is to give one's best efforts to the work. One should select the department he likes best, then prepare himself thoroughly and the rest will be easy.

The young man with a commercial training should rarely attempt to go into business for himself without first having practical experience with a good business man. It is usually better after learning the theory of business to enter the employ of the right kind of firm even at a low salary in order to become familiar with the little practical details than to plunge blindly into something which is unfamiliar.

The young man who feels himself above starting at the bottom of a business and working himself up will probably be a long time reaching the top of the ladder. The spirit of the true young American can be expressed something like this: "All I want is a chance to show what I can do; I ask for no favors nor special privileges, but am anxious

to get into work and do my best. Place me at the bottom if you will, but watch me climb."

Working Up in the Business.—Some young men seem to have an idea that their chief aim in life should be to get a job. After securing employment and having their names entered on the pay roll, they consider that the reason for special effort has been removed, and that they should do as little as possible and still hold the job. They are like the woman who was a very poor housekeeper. She made no effort to keep herself tidy or to make home pleasant for her husband. Another lady one day reproved her for the course she was taking, whereupon she promptly replied: "Why, I am married and have got my man. I don't want to catch another man so why should I fix up?" She had the idea that the mere getting of a husband was of more importance than the kind of a wife she made.

The young man who is not ambitious to work up, and who is not trying to improve is not worthy the position he now holds, no matter how humble it may be.

Room at the Top.—The old and much-used saying that there is always room at the top has been constantly borne out by experience. It is the man at the foot of the ladder who is always in danger of being washed from his place by every wave of misfortune, but the man higher up stands secure. He can watch the waves dash, but he is above their

reach. It is the man knowing but little of the business and receiving low wages who is laid off when the time of retrenchment comes.

In the various business activities there is keen competition for supremacy, and only those who can meet this competition are able to survive. There is no place for the weakling or the man who will not try. The man who is full of energy, ability, honesty, and tact is the one who is wanted. Such a man can always find a place; the world is anxious to pay well for his services. The man who takes a position should try to be the most useful man in the employ of the firm. If he does this, he will not need to worry about his position or salary.

Getting on with People.—In commerce it is necessary to deal constantly with others. The ability to get along well with associates is an important element of success. The merchant who is cross and surly with his customers drives them away even though his goods are sold at a bargain. The traveling salesman who is able to make friends is the one who sells the most goods.

In order to get the best results the employer should have tact in handling his men. If he has trouble with employees, it will be impossible for him to get the most out of them. On the other hand, if he can gain their confidence and get them interested in the work, they will do almost everything to help his business grow.

Cost Accounting and Scientific Management in Business.—This is a great day for efficiency in business. Every process is being subjected to the most careful study by improved methods of cost accounting and scientific management. In many of the old-time business enterprises, the only object of bookkeeping was to keep account of the bills receivable and bills payable. There was no thought of turning the light inward to see what trouble there might be right at home. Now, every progressive business man studies his methods to see if they are the best that are possible. The merchant keeps a cost account with each department of his establishment in order to determine just what profits are derived from each. The railroad, the bank, the insurance company, and the other branches of commerce know exactly how they stand; this results in a great saving.

Every man who expects to follow business for a livelihood should acquaint himself with methods of cost accounting and with managing affairs in the most efficient manner. He is then in a position to do his work intelligently instead of merely feeling his way in the dark.

CHAPTER VI

BRANCHES OF COMMERCE

Merchandising.—Selling goods is one of the very oldest forms of commerce. With the beginning of organized society there was need for barter in the commodities of life. At first, sales were probably confined to a few simple articles of food and clothing; but to-day all the material wants of a complex civilization may be purchased in the market. Merchandising has become a highly specialized business, organized into many departments. The country store, built at the cross-roads and carried on as a side issue, is very simple and may be conducted without much regard to business principles. The modern specialized or department store, on the other hand, requires very high ability in conducting its affairs.

Some people who make a practise of complaining at everything would have us believe that merchants are an unnecessary burden on society and that they are living in luxury on wealth extorted from the needy. This is a very narrow point of view. Those who sell goods are as necessary to

our advanced civilization as those who produce them. They enable the producer to dispose of his products and the consumer to obtain them.

In order for a person to be a successful merchant he should enjoy barter and trade. If he does not like to deal with his fellows in a business way he should select some other occupation. The merchant should be pleasing in his personality and convincing in his address; he should be able to make and keep friends, and should enjoy mingling with people; he should be neat and orderly, and willing to put an unlimited amount of energy into his work.

The compensation obtained in selling goods depends largely on the individual; but the conditions under which he works will in part determine his success. Very many of those who enter this field fail, and the profits are probably no larger in proportion to the capital invested and the risk than in other kinds of business. One of the chief causes of failure is the carrying of too large a stock of goods, which soon becomes "hard stock." A comparatively small amount of capital tied up in goods that can be turned over rapidly makes the ideal condition.

Persons of low ability often find employment in stores, but they rarely get very far along in the business. Considerable intelligence and study and a very great deal of hard work are necessary to success in merchandising. A certain amount of capi-

tal, either of one's own or borrowed, is required.

The young man who has ambitions to become a merchant can probably do no better than to get a good education and in the meantime spend his vacations in the right kind of store. After having the proper education and practical experience, he may be in a position to enter business for himself if he has the capital. If he has no capital, he can often work with a good firm, where he may become manager and finally part, or entire, owner. Merchandising is a field that is constantly crowded, but there is always opportunity for the right kind of man.

Banking.—The banking business is one that is very often misunderstood. The "man of the street" often looks on the banker as an individual of unlimited wealth whose chief work consists in counting and hoarding gold. As a matter of fact, the banker is a trustee, or steward, of the funds of other people. He takes the surplus wealth of the community and diverts it into channels where it can be made to produce other wealth. He stands in the position of the servant who was given the talents. If he does not make it produce he is like the slothful servant who hid his lord's money in the earth.

The banker does not prosper without work. He must keep his fingers on the pulse of business and must be keen in his power of discernment. He must be especially cautious, since not only is his own

property at stake, but the savings of numerous depositors must be safeguarded. This carries with it a great responsibility and no little worry.

In order to be a good banker, a person must have the confidence of the community. He should live a life absolutely clean and blameless, so that his actions can in no way lead to mistrust. He should be systematic and orderly, and able to make friends. He must be willing to give his chief energies to his business, and not be above spending extra hours to clear off the day's work when occasion requires.

The banker must have a broad insight into the different phases of business, for his success depends largely on his ability to judge between various enterprises. His training should include fundamental knowledge of finance, economics, law, agriculture, and, in fact, every activity of man in any way connected with business transactions. He must act as an adviser alike to the man seeking a good investment, and also to the man who wants capital to develop an industry.

The banking business tends to make those engaged in it conservative, exact, less optimistic, less inclined to take chances, and more careful in giving judgment. The conditions of success are measured by the number of customers of the bank, and the wisdom with which their affairs are handled. One of the chief aims is to build up confidence.

No way is open for a young man to succeed in

banking without devoting much hard work to learning the business in all its phases. He must know the grind of each stage of the work and must not expect to become cashier or president without having first performed the humbler tasks.

Transportation Activities.—In primitive times transportation was a very simple matter; but with the development of modern railroads, trolley systems, and steamship lines, the transfer of people and goods from place to place has become a business of gigantic proportions. Modern commerce depends for its existence on the development of comparatively cheap transportation rates. When sugar had to be hauled from the Missouri River to the Rocky Mountains in freight wagons the trade in sugar in the latter place was necessarily very limited. When people had to depend on stage coach and sailing boat to carry them, they traveled but little.

In railroading alone there are many departments besides those classed strictly under the head of business. First, there is the work of the civil engineer who lays out the road and superintends its construction. Next, there is the industry of manufacturing equipment. After the road is in full operation there is the work of keeping the road-bed and machinery in repair, the handling of the trains from the standpoint of the engineer and fireman as well as the conductor. There is the agent who

represents the company at the various stations. Finally there is the executive, or, more strictly, business phase of the work, with its numerous departments.

The boy wishing to become a railroad man should first decide which phase of the service he desires to enter. If he wishes to become a locomotive engineer, he can work in the roundhouse, through the various divisions of the work and as fireman, till finally he is prepared to stand at the throttle. Each division has its regular lines of promotion. A college training is a great advantage in any of the departments, and promotion is more rapid with the increased ability given by an education.

Since transportation systems are owned by corporations rather than by individuals, the railroad man is essentially a wage earner rather than the manager of his own business. The same is true of other transportation activities.

Insurance.—Many kinds of insurance have grown up in the last few years. These are necessary to lessen risks and thereby make various business enterprises more substantial and better able to obtain credit at reasonable rates. Those who decry the existence of insurance are ignorant of modern business methods.

Life and fire insurance are the kinds best known by the average person, although insurance against accident, hail, and loss of vessels at sea are all being

better understood and used more each year. It is also becoming a common practise to insure valuable animals.

Insurance companies to be of any value must have large resources at their command. Without millions of dollars in securities, the fire insurance companies would not be able to make good at the time of a great conflagration like that of San Francisco. Life insurance companies would be made bankrupt by an epidemic of disease unless they had reserve funds.

This great amount of capital makes necessary the combination of wealth by a large number of individuals. Those working in the business, therefore, are usually officers or agents of a corporation rather than proprietors. Little capital is required on the part of the agent, but success demands the right kind of personality. Competition is so keen between the different companies that only a small percentage of those who enter the field as agents are successful.

The three important steps necessary for the agent to do business are, first, to convince the prospective customer that insurance is a good thing, second, that he should insure, and third, that the company represented is the best for his conditions. The selling of insurance calls for different methods than the selling of commodities. In the latter case, the main point is to show that the article offered for sale is better for the money than that of a competi-

tor; while with insurance, the chief difficulty is in creating a demand for it.

The work of managing insurance companies calls for a high grade of business ability. The sums of money involved are so large that a comparatively small error in making investments or outlining policies would result in great losses. Outside of honesty and other similar virtues, probably the chief requisite for success in the insurance business is aggressiveness. Customers will not look up the business, but the business must be taken to them.

Telegraph and Telephone.—The development, in the last few years, of a complete web of telegraph and telephone wires over all parts of the civilized world has made a demand for a great army of operators. There is good opportunity for employment at fair wages, and the chance for advancement both in the technical and the business divisions is good. The speed and convenience of communication by telegraph and telephone will probably give these great industries a steady growth for years to come.

There are schools giving training in methods of operating the telegraph and the telephone, but the most common method of learning is by working up in a practical way. A training in the fundamentals of science and business would be of great assistance to any one expecting to become a specialist.

Other Business Activities.—In addition to the

branches of commerce already discussed, many others offer fine advantages under certain conditions. The operation of hotels, boarding houses, restaurants, etc., will always give employment to a great many people. In all of these the closest attention to detail is necessary. A customer is likely to be lost for a single inattention, regardless of any amount of previous good treatment. Other conditions of success are courtesy, affability, and industry.

Dealers in real estate, brokers, and commission men often find splendid opportunities. Success in these branches of business depends largely on the personality and industry of those operating them. The man who has the right kind of business ability can usually make a success in any branch of commerce to which he gives his undivided attention.

CHAPTER VII

MANUFACTURING

Importance.—The great industries of the day have been built up by the use of machinery to do work that was once done by hand. Raw materials of the mine and farm have been so cheaply converted into the numerous articles of commerce that people of moderate means can now enjoy comforts that could formerly be had only by the rich. New inventions in manufacturing have absolutely transformed the industries of the world in the last generation.

The manufactured articles produced in the United States in 1900 were worth more than eight billion dollars. The persons engaged in manufacturing and related industries numbered more than seven millions. There is hardly a town without some manufacturing establishment, and many communities depend for their support almost entirely on factories.

The difference in the methods of living between the savage and the civilized man is made possible chiefly by the use of manufactured articles. Clothing, house furnishings, and food are made from

raw materials into articles of use and beauty. The savage, dressed in his breechcloth and living in a cave, may be surrounded by all the materials used by the most fashionably dressed lady living in a mansion; but in the one case the material is in the raw state, while in the other, it has been worked over to make it more useful.

Kinds of Manufacturing.—The industries classed under manufacturing are exceedingly varied. They include the making of all kinds of building materials, textiles, clothing, machinery, furniture, foods, books, etc. These industries are often localized because of easily available raw materials, power, or labor. The manufacture of textiles in the United States has been confined largely to a few cities in the eastern states; many of the important iron and steel manufacturing establishments have been built up around Pittsburg.

Advantages of Manufacturing to the Community.—Manufacturing establishments are usually of great advantage to the community in which they are established. A steady market is furnished for raw materials and employment given to the population. Money is kept at home and is brought in from the outside.

Cache Valley, Utah, was for years considered to have fertile soil and the land sold at a good price; but when two beet sugar factories and a number of milk condenseries were established in the valley,

land practically doubled in price within a very short time and the general prosperity of the region was considerably increased. The establishment of such an industry as a canning factory in a region has often completely transformed it. These factories which use the products of the farm are particularly valuable to rural communities, although they are often established in large cities where labor is available.

Undesirable Factory Conditions.—In some of the older factory communities of this country and Europe, conditions have been far from ideal from the point of view of the workers. Unsanitary surroundings, long hours, and low wages have often kept the hands down to a miserable existence. Helpful legislation, labor organizations, improved machinery, and a number of other forces are at present working to correct some of these evils. The profit-sharing system adopted by a number of manufacturing establishments is doing considerable to increase the efficiency of labor and to raise the profits of the business. These will react to the benefit of the workers.

Scientific Management in Manufacturing.—The rapid rise of the United States in the production of certain manufactured articles is due largely to the adoption of the most up-to-date methods and machinery. Marden tells us that the great Pillsbury Flour Mills of Minnesota put in forty thousand dol-

lars worth of new machinery, but it was no sooner set to running than some one invented a better process. The proprietors instantly ripped up the new and bought the newest. The superintendent of a Massachusetts factory where a thousand looms were at work said to Josiah Strong, who was visiting, "Do you see that machine by your side? Well, the one that stood there twelve months ago has been supplanted three times during the year."

In manufacturing, perhaps more than in any other kind of human endeavor, it is necessary scientifically to examine every process to see that it is reduced to the greatest possible refinement. All unnecessary movements and waste of energy must be eliminated. If the efficiency of one thousand hands can be increased ten per cent. by improved methods, it is the same as saving the work of one hundred hands. This soon counts up in money.

During Mr. Carnegie's active days in manufacturing steel he had a department costing eighty thousand dollars a year whose sole business was to study the workings of the plant with a view to improving its operations. This department did not add a dollar directly to the earnings of the business, but it enabled Mr. Carnegie to locate weak points, the strengthening of which greatly increased the profits.

The Handling of Men.—The ability to handle men is one of the most important characteristics of the manufacturer or the factory foreman. Some

people naturally antagonize those with whom they work, while others by their mere presence call forth respect and confidence. In manufacturing, the profits are made on the work of the hands; hence, the success of the enterprise will depend largely on the amount each can accomplish.

Many different methods are adopted to obtain the cooperation of workers and to increase their output. All of these rest for their success not so much on set rules as on the energy and ingenuity of the overseers. Men, when considered as so many mere machines, will not give their best service. The human side of them must be appealed to. Even the ignorant laborer doing the most mechanical routine work responds readily to human sympathy. The employer or foreman, therefore, who wishes success must expect to deal with the human element in his employees and must devote his own attention and sympathies to the work if he expects their energies to be utilized efficiently.

Desirable Qualities in a Manufacturer.—There are so many grades of manufacturing and the qualities for these so diverse that it is impossible to outline in any detail what the manufacturer should know and the personal qualities he should possess. The shoemaker at his bench, and the maker of the most up-to-date locomotive are both manufacturers; yet the preparation for the two is entirely different.

The manufacturer must buy the raw materials, he

must work them over into the desired articles, and must find a market for his products. This means that he must have business ability in addition to technical skill. The writer once knew a young man who was an exceptional mechanical genius. He devised and successfully made a number of useful articles, but he could not make the business of manufacturing them pay. He gave his entire thought to the technical, and as a result the business ran at loose ends and became insolvent. He failed in a number of similar enterprises, not because his wares could not be produced at a profit, but because he had no ability or taste for the business side of the work. When his creditors finally took over this part of the business, leaving him entirely to the technical phases, the industry was put on its feet and made to yield a handsome profit.

The manufacturer should have a broad sympathy with mankind; he should have courage and ability to hold firm to his purposes; he should be loyal to his associates as well as honest and sincere in his dealings with them; he should have a good understanding of business principles; and should know the technical side of making his products.

How to Become a Manufacturer.—The young man having the proper personal qualities will find some phase of manufacturing to be a very desirable vocation. He has a good opportunity to use originality and, if proper judgment is exercised, fair

success may be expected. There is always an opportunity to work up in some business that is already well established, and it is often possible to develop something new.

A general education should first be obtained. This ought to be followed by the special training required in the industry to be entered. The natural sciences, and particularly chemistry and physics, serve as an important foundation. Every book treating of the subject ought to be read and studied. Too often, out-of-date methods are followed when a little study would show improvements that could be introduced with profit.

The would-be manufacturer must not be afraid to enter the business at the bottom and work up. Getting into some good establishment and gradually rising as ability is developed, is probably the best way to get a start. There is nothing particularly attractive about manufacturing for the man whose only ambition is to hold down a ten-dollar-a-week job and who does not care to work up.

CHAPTER VIII

ENGINEERING

Kinds of Engineering.—Engineering has many divisions, among which are:

Military Engineering.

Civil Engineering.

Mechanical Engineering.

Electrical Engineering.

Mining Engineering.

Agricultural Engineering.

Chemical Engineering.

Each of these major divisions may again be subdivided according to the class of work to be done.

The days when one man could know everything about engineering have passed. The tendency now is to specialize on some branch of the main group.

Importance of Engineering.—Practically every field of human endeavor is indebted to the engineer, who must be a forerunner of civilization in a new country and an indispensable aid to intensive construction in places that have long been settled. "The importance of this profession," says one en-

gineer, "is realized when we remember that it has made possible the modern systems of travel on land and water, the transformation of the desert waste throughout the world, the modern means of communication by mail, telegraph, and telephone, the building of homes, the sanitation of towns, and cities, and the lighting of homes, streets, and public buildings."

Desirable Qualities of an Engineer.—"The engineering profession requires in the man the same character which is so essential to the success of any one following other vocations of life. The rules of honesty, loyalty, perseverance, self-denial, etc., which are so elementary, and at the same time so fundamental, are required in this profession. However, personal adaptation for the work is probably more essential in engineering than in some of the other vocations of life." A good physique and ability to do hard work are indispensable:

One prominent engineer has the following to say: "To be a successful engineer requires: 1st, ability to meet and do business with one's fellowmen in a pleasing way; 2nd, the possession of a mind that is able to grasp big problems and to prepare satisfactory solutions to these problems quickly; 3rd, ability to hold one's temper under trying conditions; and 4th, willingness and ability to render the same courteous treatment to the individual who has but little business to do, as to the individual having big

business interests that need attention." An engineer must be resourceful and able to meet all kinds of unexpected emergencies. In his work he is constantly meeting new conditions, and he must find a way to face them.

The following story related by Boyles late of the *Iron Age* and retold by Marden, illustrates the kind of men who make successful engineers: "A bright lad, with clear title to write A.B. and M.E. after his name, went to work in a shop where an air compressor was used under somewhat peculiar circumstances. His duty was to run this compressor, keep it clean, and do whatever else the foreman thought him fit for. No one knew that he was an engineer with a degree, or that he could have played school-master to the foreman or superintendent. He took good care of the machine under his charge, but the governor gave trouble, and the representative of the makers was sent for. He came, looked it over, and spent a fortnight trying to make it work properly. Then another man of higher rank came and spent another week on the same job. The young man answered questions respectfully and asked them so intelligently that he soon gathered a great deal of useful information.

"Among other facts he learned that a simple, practical, and reliable governor for air compressors was greatly needed and that to devise one would repay effort. He got out his books, read all avail-

able literature on air compressors and went to work on the problem. In about three months he had found a new principle in air compressor governors, had worked out its formulae under all conditions of constant and variable pressure, had made a full set of drawings, had them dated and witnessed, and was ready to 'talk business.' He approached the superintendent of his own shop, but got no other satisfaction than that the concern had no money to waste on amateur experiments with other people's machines. He then wrote to the general manager of the works which built the compressor, giving a brief statement of what he had done. By return mail he received a railroad ticket and an invitation to visit the works.

"The result was that his idea was enthusiastically approved, and arrangements were made for patenting it in every country having a patent system, and the young man was offered a position on the engineering staff of the works, which he promptly accepted. When he returned to the shop in which he had originally worked, it was through the office instead of the gate, and his errand was to perfect the air compressor he had tended by equipping it with a governor. He is now chief engineer of the concern he went to with nothing but a well-considered and useful idea. If the young engineer will use what he knows in such work as he has a chance to do, the fact of his capacity for more responsible

duties will soon appear and he will find that the road to the top is open to him—whether in the shop in which his career begins, or in another, is immaterial. He will have more opportunities than he has time to avail himself of.”

Preparation for Engineering.—Engineers are pretty well agreed that it would be unwise for a young man to attempt to follow engineering as a vocation without a college training in the subject. There are a few of the simpler kinds of work that can be done without much special training, and a bright person can pick up most of the necessary facts by working with others who are well trained, but in a technical subject like engineering, experience is a very slow schoolmaster.

One difficulty with undertaking to do work of this kind without adequate preparation is that just as a good start is made and work begins to come, a person finds himself unable, on account of lack of training, to take the most desirable contracts. He is constantly laboring against a handicap.

A four years' college course above the high school, to which is added a number of years of practical experience, is the preparation usually considered necessary for the man who poses as a thorough engineer. It is a mistake for a person to undertake difficult engineering work without being prepared for it. The effects of a failure in this field are very hard to overcome. A thorough training in mathe-

matics and the fundamentals of science are necessary.

Opportunities in Engineering.—This is a day of construction and development of all classes, and the engineer is in demand to plan and carry out these works. Whether the country is new or old, there is always something for him to do. There are many opportunities for those who can discover and outline profitable enterprises, and place them before the investor who wants to find such undertakings. There is a call for reliable men for private corporations and for government work.

Some of the branches of engineering have become somewhat crowded with young men having no particular ability, but the engineers of known merit have been able to find plenty to do. Those who are able to harness the forces of nature for the use of man can always find problems, the solution of which will be profitable. It is a glorious occupation to be acquiring dominion over the earth and its forces and using them for the welfare of mankind.

CHAPTER IX

ARCHITECTURE

The most majestic of "The Sister Arts"
Is that which builds; the oldest of them all
To whom the others are but handmaids
And servitors, being but imitation, not creation.
—Longfellow.

Definition of Architecture.—According to Williams, "Architecture, in its limited sense, is the art of designing and building houses, but, in its widest sense it is the art of planning and erecting all kinds of structures and work from building material. The work constructed may be of many kinds: as bridges, pyramids, monuments, walls, towers, forts, ships, arches, aqueducts, gateways, shrines, tombs, amphitheatres, peristyles, arcades, pillars, pergolas, ocean piers, canal locks, viaducts, docks, etc. Architecture is the art of building."

It is the combination of an art, a science, and a business. "It is the most useful of the fine arts and the most noble of the useful arts." "Art utility, construction, sanitation, economy, and safety are its

subjects." Good architecture must include ideas of beauty, usefulness, and economy.

Importance of Architecture.—More than almost anything else, architecture is the visible expression of human progress. The structures reared by a people are an index to their accomplishments. Next in importance to being properly fed and clothed, people should be adequately housed. Buildings should be appropriately and well proportioned. There is a great waste in money and in beauty by poor taste in planning. The abodes of men endure for centuries, and mistakes in construction may remain to plague many succeeding generations. A lack of harmony may be constantly offensive to the sensitive; a bad arrangement may cause an untold waste in energy and a loss of comfort; and proper planning may greatly decrease the cost of construction. People with good business judgment usually employ an architect to plan their buildings, while others may leave the planning to chance.

Qualities of an Architect.—John Galen ~~Harvard~~ ^{Harvard}, architect of the University of California, says: "No other art or profession requires in its followers such a combination of qualities as does architecture. The soul of the poet, the eye of the painter, the practicability of the shopkeeper, and the mechanical knowledge of the master craftsman are the attributes of the ideal architect. Probably no man ever possessed all of these qualities in sufficient degree

to deserve the appellation, 'an ideal architect'; yet there have been great men who have proved that the real in architecture can be brought close to the ideal. These are the men who have discerned that beauty and utility, architecture's prime elements, are closely related, and can be brought together in harmonious and impressive unities.

"Many men who follow the profession of the architect cannot, or do not, express in their work this dual nature of the art. Some of them are able builders. They erect most convenient houses, excellent shelters from the rains and snows, the cold and heat; but I think nature desires that those who raise permanent structures in her domain shall give them a beauty in keeping with her own. Those who overlook this, violate universal harmony. Others in the profession err in the opposite direction. Forgetting that all material things have a foundation in Mother Earth, they make designs of buildings that are veritable castles in the air—charming, but impossible, unless reduced to practicability by others. The first of these classes are builders; the second, artists. Neither, in my opinion, are true architects."

Training for Architecture.—The training of an architect cannot be too broad. He should have a good knowledge of art, history, science, and business. He must be a designer of the new as well as follower of the old. In Europe, training has in the past been given by apprenticeship, while in America,

most of the architects have received their training in technical schools.

In addition to study at an institution, a man who is preparing himself as an architect should do considerable traveling in order to study the better examples of architecture, otherwise his breadth of view will be limited. He would do well to spend a number of years working with a well-established architect before beginning for himself.

Opportunities in Architecture.—There are already more persons attempting to practise architecture than can find work, but those who are best fitted for the work have more than they can do. It is the men of only ordinary training and ability that find it difficult to get employment.

People in general should be educated up to a more general use of architects. If this were done many expensive mistakes would be avoided, particularly in country districts. Here the buildings are usually constructed without any plan; they are often not at all suited to the conditions for which they are intended. True, there are no great inducements to attract architects into the country, as the people who live in rural communities are not converted to paying out money for plans. There is great need, however, for the development of a more rational and a more widely-used rural architecture.

This is an age of building, when all of the discoveries of science are applied in making structures bet-

ter suited to the needs of civilization; and there is opportunity for the use of inventive genius in designing structures that will more fully meet the needs of man.

CHAPTER X

MEDICINE

Importance.—"In the health of the people lies the happiness, strength, and prosperity of the nation." Any people, no matter what their natural strength, cannot accomplish anything worth while when torn with disease and plagues. The strongest individual is rendered entirely helpless when attacked by sickness. Good health, therefore, is probably the greatest essential to the well being of mankind.

In earlier times, all forms of sickness were attributed to the ill will of the gods, and man was thought to have practically no control over disease. Hippocrates, a Greek physician and philosopher, living during the fifth century before Christ, laid the foundation of medicine by attributing sickness to some physical cause and trying to find a remedy for it. The discoveries of modern science in chemistry, physics, physiology, and bacteriology have given new means of studying disease and methods of combating it. One thought of the age is to discover the cause of sickness and to find methods of preventing it. The maxim that "an ounce of preventa-

tive is worth a pound of cure," has been used as a constant guide.

To those who study medicine is intrusted the health of the community, and therefore the well being of mankind. They must be the leaders and must point the way to others. This is an age when every man is more or less familiar with the principles underlying the preservation of health, but he must be constantly guided by those who have made a special study of medicine.

The Prospective Doctor.—The young man who is considering medicine as a vocation should carefully take stock of himself to see if he is adapted to the work. One young man whose parents are well-to-do complied with their request to study medicine. He was sent to the best college that could be found, but after spending a number of years in study he found himself entirely unsuited to the profession. Further, it was very distasteful to him. Needless to say he did not practise successfully. Had more attention been given to the question at first, a number of valuable years and a great deal of money could have been saved.

A young man who lived in a small town where a doctor was making a great deal of money decided he would study medicine. He bent every energy to prepare himself for a medical college. One day he read an article which showed that the money made by doctors did not average more than that

made in a number of other vocations. This seemed to take away all his ambition to become a doctor. He had been thinking entirely of the money. Fortunately he took up another line.

Dr. George F. Shrady, who was General Grant's physician, tells, in the following words, some of the things to be kept in mind by the young man who expects to study medicine:

"In the first place, your young man must consider whether or not he is suited for the medical profession at all. Does he experience a desire, an absolute call, toward the life of a physician? Does he look upon medicine as something far more than a mere money-making pursuit? Is he content to devote his whole mind to the study of medical science and its development, to study morning, noon, and night and to continue unceasingly to study until death shall summon him to his reward? Unless he can answer in the affirmative, he would better give up the thought of becoming a doctor."

Good health is an absolute necessity for one having a successful practise as a physician. Calls are so irregular and, during certain seasons, so numerous that an iron constitution is necessary to keep up under the strain.

The doctor, to be a successful practitioner, should have a cheerful disposition and be able to get along well with people. There are many men who are thoroughly familiar with the principles of medicine,

who make a miserable failure in practise on account of their dispositions.

Only Good Doctors Needed.—A report of the Carnegie Foundation on Medical Education has the following to say about the need for better trained medical men:

“For twenty-five years past there has been an enormous over-production of uneducated and ill-trained medical practitioners. This has been in absolute disregard of the public welfare. Taking the United States as a whole, physicians are four or five times as numerous in proportion to population as in older countries like Germany. In a town of two thousand people one will find, in most of our states, from five to eight physicians where two well-trained men could do the work efficiently and make a competent livelihood. When, however, six or eight ill-trained physicians undertake to get a living in a town which will support only two, the whole plan of professional conduct is lowered in the struggle that ensues; each man becomes intent on his own practise, public health and sanitation are neglected, and the ideals and standards of the profession tend to demoralization.”

There are more than one hundred and thirty thousand physicians in this country. This is perhaps larger than the number should be, but it does not imply that no other should enter the profession. On the other hand, there never was a better opportunity

in the practise of medicine for men having the proper training and personality.

Since the health of the people must be left largely in the hands of the "profession," it is important that all who practise come up to the highest possible standard. A poor farmer, aside from the bad example, could do but little harm, but a poor doctor may jeopardize the health of an entire community.

Preparing to Be a Doctor.—Medicine is a profession that cannot be practised without a very considerable amount of technical training. At present, the regular medical courses embrace four years of study in a medical college preceded by preparatory work and followed by practise in a hospital.

The best medical colleges are now requiring for entrance, in addition to four years high school, three or four years of college work in sciences and related subjects. Where the chemistry, physiology, bacteriology, etc., have been taken before entering the medical college, there is much more time left to study subjects relating more particularly to medicine. As a preparatory step, young men often find it advantageous to study in the office of a reliable physician. This preliminary study and observation makes them more able to grasp the theoretical work of the school.

Beginning Practise.—Before the graduate from college goes out into the world for himself, he should have a year of hospital practise in a large city. The

cases met with here will so fix principles on his mind that he will be benefited throughout his entire future practise.

Even if a doctor expects to specialize later, it is an excellent thing for him to have a few years of general practise, to be used as a foundation for his specialty. A young physician cannot expect ordinarily to jump into a large practise all at once. It takes years to build up confidence and to get thoroughly established. The getting of the diploma does not constitute the entire battle. In order to be worthy of a good practise, constant work is necessary. Doctor Shrady, after discussing the preparation a doctor should have, adds:

"Equipped thus thoroughly for a practical start in life, let Doctor Young Man not lay aside his book; until death beckons him away, he must read and study. All the new books, all the medical periodicals, all the latest instruments and contrivances, must be familiar to him. He must keep fully abreast of the rapid tide of medical improvement, or else drop helplessly and almost uselessly behind. From the day that I was graduated, I have never ceased to study, and I shall never cease to study until the end. If a young man does not like the prospect of life-long labor, let him not hope to become a successful physician."

Dentistry.—There are about thirty thousand dentists in the United States, or nearly one-fourth as

many as there are physicians. In his study the dentist has many things in common with the physician. The requirements, however, are not usually so high and the field for the exercise of special genius not so great. His hours of work are regular, and after he gets a good practise established the dentist usually finds himself in an agreeable occupation.

CHAPTER XI

LAW

The Need of Law.—"Orderly and well-regulated society," writes a successful lawyer, "could not exist without an authoritative pronouncement of the rules governing the activities of the units composing that society, as well as the society itself. This pronouncement, whether it comes from the single individual sovereign, from a body of rulers, from the representatives of the people, or the people themselves, is the law of society.

"It follows that without law there could be no organized society, and consequently law is a fundamental and basic necessity. Just in proportion as society becomes more highly organized and its activities more complex, it demands for its administration special skill and knowledge. As food is unconditionally necessary to man's physical existence, so law is unconditionally necessary to the existence of the social body; and just as the necessity for food creates an imperative demand for a special knowledge and skill in its production, so the need of society creates an imperative demand for the services of

those skilled in the administration of law. Law as a vocation, therefore, is a social necessity."

Desirable Qualities in a Lawyer.—There is probably no vocation having so divers effects on those practising it as the law. Those who are honest and have a love for justice find a wonderful opportunity for service along these lines; while persons of low character find in the law a means of stooping to all kinds of trickery and foul play. It is important for the welfare of society that those engaging in the practise of law be men of sterling qualities.

One judge of considerable experience expresses his ideas of conditions of success as follows: "First, absolute honesty; second, absolute honesty; third, absolute honesty; fourth, absolute honesty; and fifth, absolute honesty."

Another prominent judge says: "The personal qualities desirable in the practise of law consist primarily of those common to all vocations, viz.: integrity, industry, and stick-to-it-iveness. The special mental qualification, however, is a clear analytical mind, without which no lawyer will ever be more than ordinarily successful. Apart from this necessary mental attribute, other qualifications are quite diversified, and generally result in the ultimate natural selection of legal specialists.

"The person possessing alertness, quick-witted judgment of human nature, ready discernment of facts, and of the methods for unraveling them, abil-

ity to plausibly and good naturedly impress his ideas upon the tribunal he confronts, makes the most successful court attendant and trial lawyer. The individual having a more deliberate and contemplative mind, becomes the legal adviser, the office lawyer, the brief-maker, the law professor, or the author of legal literature. The lawyer having patience, a calm and impartial judgment, and a general all round knowledge of human affairs, usually becomes the best presiding judge."

Young men often think that if they are successful in a college debate or have ability in declamation, they should become lawyers at once, when they may in reality not be at all suited to the profession. The Lord Chief-Justice of England said regarding prospective lawyers: "I name love of the profession as the first qualification, I name physical health and energy as the second. No man of weak health ought to be advised to go to the bar. For mental qualifications, clear-headed common sense. There remains one other main consideration to be taken into account, namely: ability to wait. Unless a man has the means to maintain himself, living frugally for some years, or the means of earning enough to maintain himself in this fashion, say by his pen or otherwise, he ought to hesitate before going to the bar."

Preparation for Legal Practise.—"The best preparation for practise, after an inherent liking for the nature of the work, is a wide acquaintance with

human affairs. The practitioner is dealing always with business activities of others. There is scarcely a branch of human knowledge or activity that the lawyer does not have to study. To try a case successfully, involving mining, irrigation, livestock, physical injuries, and so on to infinity, the lawyer must make himself familiar with all these subjects. The more intimate the acquaintance of the practitioner with the details of all the other vocations, the more successful he would be. A training in logical thinking and accurate deduction, wide knowledge of history and economics, together with facility and technical skill in the use of English, would add greatly to the lawyer's equipment." In these days of good schools, the only safe recommendation is that the prospective lawyer attend a regular law school for his technical training. Many successful lawyers have obtained their knowledge of the law by study in a law office or by reading alone. This method, however, is likely to leave a person without the broad knowledge of the principles of law that is obtained in a first-class college.

After graduating from his course, it is a good plan to spend a few years in the office of a good law firm. The school teaches the principles, and work in an office gives the needed preliminary practise.

Opportunities in Law.—In the United States, law is probably the most overcrowded of all the professions. There are in the country about one hun-

dred and fifteen thousand lawyers, the greater part of whom are not successful. In Chicago where there are five thousand lawyers, most of the legal work is done by about one thousand, the others merely existing. New York has more lawyers than all France.

Probably one reason why there is such a mania for the study of law in America is that it is considered as a stepping stone to politics. Another reason is the high fees sometimes paid for individual cases. These are uncommon, but they act as a stimulant similar to the occasional "lucky strike" found by the prospector. Very few men get rich in the practise of law, but some lawyers use their profession as a means of making profitable business connections. "Ninety-five per cent.," says Austin Fletcher of the New York Bar, "of those who enter upon the practise of the law would probably have done much better if they had chosen a different kind of work. Not more than five per cent. attain a genuine success, in accomplishment or reward. No one should enter any of the learned professions because he believes it offers a large pecuniary promise. If one prefers the law to any other occupation, he possesses one of the elements of success in taking it up. He should next be certain that he has sufficient stamina to hold the moral rudder true, for there is no profession or business vocation which requires a keener moral sense and greater strength

of character than the practise of the law." Of mere petifoggers, legal tricksters, and practitioners of low ability, the country has too many; but there is still a crying need for men of character and ability to assist in maintaining the rights of mankind.

CHAPTER XII

POLITICS

Definition.—The word “politics” is used to express a number of very different things. To many, it means a system of graft entered into by a number of tricksters working under the cloak of government. This, however, is not its true meaning any more than farming means the raising of inferior products of the soil to be used in cheating purchasers out of their money.

The Standard Dictionary defines politics as being, “The branch of civics that treats of the principles of civil government and the conduct of state affairs; the administration of public affairs in the interest of the peace, prosperity, and safety of the state; statecraft; political science; in a wide sense embracing the science of government and civil polity.”

Thus, it is the management of public affairs—those pertaining to society taken as a unit. Dishonest men may use it to further their own ends, but this does not make the subject any the less important.

Importance of Politics.—"Politics, or the science of government," says a member of Congress, "is the greatest and most profound study of mankind, and has attracted to its consideration in all ages public-spirited men of high character, great knowledge, and profound wisdom. A full knowledge of the true principles of government and the ability to conform to them is the highest degree of intelligence. Once having mastered this science the way is clear for unimpeded progress in every other vocation in which human effort is enlisted."

Many people are pessimistic in their views of politics. They simply say: "Politics is corrupt and the less a person has to do with it the better he will be off." They follow their own advice and have nothing to do with it. If politics has degenerated in a free country like ours, it is because the masses of the people have left the subject entirely alone. They have not taken the trouble to attend primaries or even to vote, and then they complain that conditions are not as they should be. The only way to keep dishonest men from running public affairs is for those who are honest to take a part themselves.

Every man of ability living under a free government owes it to himself, to his family, to the nation, and to posterity to lend his strength to making the government what it should be. There are many who, if a merchant should make a few cents over-

charge on a bill of goods, would spend any amount of time getting it corrected; yet when questions of national importance are at stake, they will not take a few minutes to study the issues or make any effort to have good men elected or good measures adopted. The tendency to leave these matters to the others is altogether too widespread.

Politics as a Career.—Politics should probably not be considered as a life's vocation, since it is usually an outgrowth of success in some other field. In some countries politics is a vocation that is prepared for the same as other vocations, but this is not the case in this country. The person who devotes his time seeking public office to satisfy mere personal ambition is sure to meet with many disappointments, sooner or later.

Shakespeare, in his play "Henry VIII," shows how unsafe is the ambition for honors of office. He makes Cardinal Wolsey, who has spent a lifetime trying to satisfy his lust for official preferment, voice his disappointment as follows:

"Let's dry our eyes; and thus far hear me, Cromwell;
And—when I am forgotten, as I shall be;
And sleep in dull, cold marble where no mention
Of me more must be heard of—say, I taught thee;
Say, Wolsey—that once trod the ways of glory,
And sounded all the depth and shoals of honor—
Found thee a way out of his wreck, to rise in;

A sure and safe one, though thy master missed it.
Mark but my fall and that that ruined me.
Cromwell, I charge thee, fling away ambition;
By that sin fell the angels; how can man, then,
The image of his maker, hope to win by it?
Love thyself last; cherish those hearts that hate thee,
Corruption wins not more than honesty;
Still in thy right hand carry gentle peace,
To Silence envious tongues. Be just and fear not;
Let all the ends thou aimest at, be they country's,
Thy God's and truth's, then if thou fall'st, O
Cromwell,
Thou fall'st a blessed martyr."

Even though there are often disappointments attending the holding of public office, it is necessary for some one to administer the affairs of government. To the person with pure motives, the public service affords an opportunity to do good; and, as such, it should be considered as a compliment and something worth striving for. "The office should seek the man, not the man the office."

There are good opportunities in the town, the county, the state, and the nation for young men of ability to spend a few years as holders of office. There is also a call for all to take an interest in political affairs and to do what they can to improve the methods of government. Nothing but contempt,

however, should be given the man who tries to exploit the public good for personal gain, and whose only interest in politics lies in the money he can make out of it.

CHAPTER XIII

TEACHING

Kinds of Teaching.—There are numerous grades in the teaching profession, ranging from the instructor of a few children of kindergarten age to the head of a department in a large university. Indeed, there are teachers who are in no way connected with any regular educational institution, but who impart instruction to apprentices or other associates in the various activities in which they are engaged.

Teaching as a vocation, however, is usually confined to the public or private school of various classes, and those who engage in it usually spend their entire time at this work. They generally receive a definite salary which is fixed each year. Various degrees of freedom are enjoyed, ranging from the primary teacher, who may have to submit to a supervisor a plan of each exercise, to the college professor who has entire charge of his department.

Importance of Teaching.—No work in the world can be higher or more noble than that of guiding and shaping human lives; and those who have to

do with teaching the rising generation are truly the moulders of civilization. The teacher in the school and the parents in the home are the two forces that determine, in a large measure, the preparation with which the child must face the world. If his training has been lacking or if improper ideals have been given him, he will enter upon the serious work of life greatly hampered; but if in home and school he has built up a strong character and has received the learning that will be helpful to him, he can face the world without regrets. All he has to do is fight and conquer. He is protected by the impenetrable armor of character; and, taking the sword of truth in his strong right hand, he can hew his way through an army of obstacles and come out triumphant.

The good the teacher may do is not confined to the few students who come directly under his tuition, but it extends on from generation to generation. The Great Teacher of all time had but few disciples while he lived, yet the "glad tidings of great joy" have blessed millions.

Many examples could be given of entire communities being well nigh made over through the efforts of one teacher; one will suffice. A young man of high ideals, strong personality, untiring energy, and excellent training went into a small town as teacher in the schools. He found no interest in education, no progress of any kind. The boys went to school

as little as possible; instead they spent most of their time loafing on the street corners telling coarse stories. There was no ambition to do anything except to be on the sidewalk as many months as possible during the year.

The young teacher, by using great tact and doing an almost endless amount of work, finally began to awaken interest in higher things. His first converts helped him to make others, and finally he had the entire community aroused. Many young people were induced to go away to school. These later returned home and became leaders. The town assumed an entirely different aspect, and the next generation was born under absolutely changed conditions.

Desirable Qualities in a Teacher.—A teacher should first of all have a love for his calling. If he lacks this one quality he should engage in something else, since his dislike for the work is sure to manifest itself in his teachings. He should feel, on entering the schoolroom in the morning, that a day of joy is before him, and in the evening he should have the satisfaction that comes from a day well spent and a pleasant duty performed. A farmer may not like his work and no one but himself be injured by his attitude; but if the teacher's heart is not in what he does, all who come under his tuition will feel the ill effects.

One who works in the schoolroom should have a

pleasant personality and be able to win the confidence of his associates. He should have good discipline and be able to maintain the mastery under all circumstances.

The prospective teacher must be sufficiently robust in body to endure the strain resulting from close confinement within doors. He should be of an intellectual turn of mind, and should have the preparation necessary to teach his subject. It is important that his character be good in order to build properly the characters of those coming under his charge.

Preparation for Teaching.—Preparation is the keynote to success in teaching. He who enters the field without being prepared to instruct is not only untrue to himself but he is doing a great injustice to those coming under his direction. Natural ability counts for much, but it can never make up for lack of information on the subject one is to teach. It is better to have the child untaught than to teach him what is not true. It often takes a lifetime to correct mistakes made by incompetent teachers.

The preparation needed varies with the kind of teaching to be done. The teacher must be familiar with the facts he is to present to others, and in addition should have a broad view of the subject in its various relations, in order that he may give the facts their proper setting.

In the lower grades, the teacher must have a

knowledge of child life, and know how to appeal to childish fancies. With college students of maturity, it is probably necessary to pay less attention to this phase of teaching and more to the facts presented. Any teacher, whether in the kindergarten or in the college, should have an understanding of the principles of psychology and methods by which the mind acquires knowledge. The young person who expects to make teaching a life's work should, in addition to preparation in subject matter, attend a first-class normal school. No teacher should have to work against the handicap of not having a normal training. He may be a good teacher without it, but his usefulness will be greatly increased by having this extra tool. It takes years of preparation for teaching in any line, but success cannot be had without paying the price.

Compensation of Teachers.—No one ever heard of a teacher getting rich simply by working at his profession. In the past, the monetary compensation has been far short of the service rendered, but each year sees an improvement in this respect. The salary varies from a few dollars a month in isolated rural schools to as high as ten thousand dollars a year in a few cases for specialists in the large universities.

While the teacher does not accumulate wealth, he usually makes a comfortable living and at the same time has the opportunity to associate with a fine class of people. He makes less in actual wages

than he could probably get in some other line, but this is partly made up to him by the pleasant conditions of his life as a teacher.

He must also receive part of his compensation in the satisfaction coming from the good he does to his pupils. When, after years of hard work at low pay, an old student comes up and putting his arms around him says: "This is the man who started me right in life. I owe all I am to his wise teachings"; then it is that dollars and cents sink into insignificance and the teacher feels fully paid for every effort he has ever put forth.

Opportunities in Teaching.—To the young man who has a love for the work, whose very soul burns with a desire to instruct and who is willing to prepare himself properly, there is always an opportunity in the teaching profession. There are in this country about half a million teachers and the field is never greatly overcrowded. Many men leave it to enter some other business, and many of the lady teachers leave it to get married; hence, recruits are constantly needed. Indeed, the demand is so insistent that it is impossible to get teachers with adequate preparation.

The higher one goes in the profession, the greater are the demands for his services. Of poorly prepared and inefficient teachers, there are plenty; but of those who combine natural ability with proper training, there is a great dearth. The young man

desiring to spend his life in the service of his fellows, and being willing to give those services for moderate monetary compensation, will find the teaching profession a very attractive field.

CHAPTER XIV

ART

Importance.—Art enters so intimately into every phase of life that it can hardly be classed as a vocation by itself, although in some of its phases, such as painting and sculpture, it becomes a profession in which the artist spends most of his time. It is usually divided into two classes: first, the fine arts, such as painting, drawing, architecture, sculpture, music, engraving, and poetry; and second, the useful arts, such as the operative and mechanical arts, industrial arts, agriculture, transportation, etc.

“Its domain,” says W. H. Williams, “embraces the whole range of man’s activities and industries. The realm of art contains the finest products of man’s skill, the best achievement of his hands, the highest offering of his intellect. All things, brought to a state of perfection by human labor, have reached that condition because of persistent effort in some one of the divisions of art.

“A work of art is an expression of the worker’s thoughts. It is a copy made from the worker’s ideas. It is a result of the inspiration of his genius. The

material wrought upon simply receives an impression of the mental picture in the soul of the artist.

"Works of art which have been made by a master's hand have great power in them. They appeal to one's ideas of grace, harmony, and beauty; they arouse the finer senses of the beautiful; they create feelings of delight because of the perfection of their execution, and truthful expression of the thought for which they stand as representation."

Personal Qualities of an Artist.—The worker in art, probably more than in any other field, must have a temperament suited to the work. Most any one can learn to draw or paint in some fashion if he spends enough time, but one with natural ability will acquire skill in a fraction of the time necessary for one without talents in this direction. In addition to an artistic temperament, the prospective artist should have a love for the work, amounting almost to a passion. Beauty in form and color should appeal strongly to him. He should have a vivid imagination and sufficient technical skill to carry out his ideas. Ability to work hard and willingness to sacrifice are necessary for success.

Preparation.—The preparation for work in art depends to a great extent on the branch that is to be followed. A general education, including at least as much as the high school, is the first requisite. This should be followed by a number of years of special study in an art institute or in an art center.

Becoming an artist is not a question of learning facts, but of developing ability to execute. Eminence cannot be attained in a short time; long years of persistent application are necessary in acquiring skill.

Opportunities in Art.—The close relationship between art and the industries makes it possible for those who are prepared to do certain kinds of art work to find remunerative employment. Some who are interested in art for art's sake feel themselves above doing anything that flavors of the commercial. They will paint to express an idea of their imagination, but will not consent to illustrate magazines or catalogues.

There are very good opportunities in the industries for designers as well as illustrators, and both these fields pay well for those who are most competent. There has developed during the past few years a great demand for teachers of art in the common schools. These usually receive higher wages than are paid to the teachers of ordinary subjects.

In the field of pure art, success comes but slowly. A person must be classed almost as a master before he receives any great recognition. It is usually necessary for those who wish to follow art to spend considerable of their time doing work that pays; this does not leave them the time needed for rapid progress in pure art.

Music.—Music is probably the most universal method of expression. The savage of the wilderness has musical instruments, and he has learned to use his voice in expressing his emotions in song. Every grade of society up to the most cultured and learned has its music. People, practically without exception, enjoy hearing music even though they do not have ability to produce it themselves.

Music, as a vocation, must be confined to comparatively few. There are in the United States about 92,000 musicians and teachers of music. Many of these spend only part of their time in this field.

A musician should be refined and artistic; he should have a good ear and, if a singer, a good voice. He must have patience and perseverance and be willing to devote years to diligent study and practise.

There is a constant demand for proficient music teachers since the subject requires considerable individual instruction. The compensation is usually good for those having ability, individual performers often receiving very high salaries. To make the greatest financial success in music as in anything else business ability is necessary.

The refinement and real pleasure accompanying the rendering and hearing of good music make it a desirable feature in every home. All should learn

to appreciate music and should know something about it although but few care to make it a life's vocation.

Music is a jealous mistress; she demands the entire attention of those who would succeed by her charms. The great singers of the world have to deny themselves all kinds of pleasures in order to keep in proper condition. They must be extremely careful of their diet and must avoid excesses of all kinds.

A voice is not the only requirement for a great singer. A good head and ability to do almost an endless amount of hard work, amounting sometimes to drudgery, must accompany the musical talent.

The Stage.—In 1900, there were in the United States 34,760 persons engaged in theatrical performances. This was more than were engaged in either dentistry or architecture, and nearly as many as in engineering.

Actors, as a rule, do not make high wages, although a few who have attained eminence receive very high salaries. The stage often appeals to young people on account of the opportunity to travel, and because they are constantly brought before the public. The fact that there is no chance for settled home life makes it very unattractive to many people who are more mature.

Acting is one of the oldest of the arts, and, at times in the world's history, it has been held in

high repute as a profession. It affords wonderful opportunity for the expression of human nature and it may be used as a source of great uplift to mankind.

CHAPTER XV

MINING

Importance of Mining.—It is often said that all the industries are based on agriculture and mining. Certain it is that civilization could not be in a very advanced state without the metals that are furnished by the mines. In the history of man, his advancement is marked by his ability to use the products of mining. First came the stone age when no metals were used, and progress was slow prior to the time when the use of copper, iron, silver, and gold was discovered.

The materials employed by man in making tools with which to work, in constructing transportation facilities, and in building houses are taken largely from the mines. Cheap methods of removing metals from the earth and extracting them from their ores make possible the necessities, conveniences, and luxuries of modern civilization.

Kinds of Mining.—Mining is usually divided into two classes, depending on the kind of deposit. In the one class such materials as iron ore, coal, and salt are found in horizontal beds. In other classes

the ore is found in veins, or lodes. The method of mining is entirely different for these two classes.

Ore usually occurs in the mountains at some distance from centers of population and it is there that the mining camp must be built. This often consists of a town made up almost entirely of those connected either directly or indirectly with the mines. The existence of the community depends on the duration of the body of ore, and when this is gone the settlement is abandoned. In some cases other industries spring up, making the community permanent.

The People Who Mine.—In the United States, there are more than half a million men engaged directly in the business of mining. Most of these are the miners who work for wages; but a great many of them are owners, foremen, engineers, and others with large responsibility. The man who works in the mines as a laborer needs a strong body, coupled with a fair amount of intelligence. If he possesses these and is faithful in his work, he will have no difficulty in getting along after having a little experience.

Those who have charge of mining operations should have good judgment, and they must have sufficient self confidence to carry out their ideas. One man who has become wealthy as a mine operator lists the desirable personal qualities of those engaged in the mining business as follows: "Cour-

age, patience, and perseverance to execute; thoroughness, keen observation and ability to correlate data and evidence, so as to construct sound working theories; and ability to organize and systematize, so as to operate efficiently." Another successful mine owner says: "One certainly has to use his own judgment, otherwise he would be talked into more wild-cat schemes than a few."

Mark Twain says the definition of a mine is a big hole in the ground and the owner thereof a liar. There are so many fake mining schemes and so many opportunities for deception in mining that it may seem from the outside that dishonesty is part of the game. As a matter of fact, there is no business where honesty is more necessary than in legitimate mining.

Preparation for Mining.—The work of a mine laborer requires very little preparation outside of experience; but to be an expert in mining requires years of study and considerable practical experience. In addition to a general education, special attention should be given to geology, engineering, and business. Courses in these subjects obtained at college will be of great help, but the real training must be had in the University of Experience. The young man fresh from college who wishes to become an expert in mining should, for a number of years, strive to get experience rather than to make money. It is better to work in a number of camps

in order to become acquainted with various conditions.

Compensation in Mining.—Wages in mining average higher than in most other occupations, but it also costs more to live. Men of extraordinary ability command very high salaries. Exceptionally good men are scarce in mining just as in every other industry. Most of the rich men of the West have acquired their wealth in mining; at the same time many fortunes have been lost in the business.

One trouble is that the money comes so easily its value is not appreciated and it is likely to be squandered. The author was once talking with a miner who sold a prospect for \$15,000. He said that at the end of three months he did not have a cent left. "But," he added, "I tell you I had a good time while it lasted." This is too often the case with the money obtained so easily.

Opportunities in Mining.—John Dern, President of the American Mining Congress, writes regarding opportunities in mining: "The days of prospecting and finding a bonanza in the United States are almost past. Large-scale operations, or new processes offer most of the opportunities to-day. There are plenty of chances for the man who has the gift of vision, the scientific knowledge, the executive and business ability, and the energy. But getting rich over night in mining will be less frequent in the future than it has been in the past.

“A gambler or plunger sometimes makes a success in mining, but generally he goes broke. Mining should be conducted on careful, conservative, scientific lines, and when so conducted there is bound to be some degree of success. There is always an element of chance that is fascinating, but the miner who makes the real success is the one who discounts luck, and who figures on coming out ahead without the aid of luck.”

CHAPTER XVI

RESEARCH AND INVENTION

Meaning of Research.—Diligent investigation for the purpose of finding a truth or establishing a law may be considered as research; which also implies study in an unexplored field of knowledge for the purpose of increasing human understanding. Mankind has only begun to explore the laws of the universe. The wonderful works of nature are before us every hour of the day, yet man with his limitations is able to comprehend but slowly. The discovery of even the simpler laws of the natural world has often required years of untiring investigation. During the early history of mankind, but little attention was given to research; hence development was slow. The last century, on the other hand, has been a time of discovery in every line, and, as a result, more progress was made than during all the previous thousands of years that the earth has been inhabited by man.

To illustrate the methods of getting at information in the older times, the story is told of two feudal lords who got into a dispute about the number

of teeth in a horse's mouth. They consulted Aristotle and all the other writers on the subject, and each brought forward information that had been handed down from father to son, but the dispute grew warmer and warmer. Each lord gathered his retainers around him, and soon a battle ensued. After a number of lives had been lost some one suggested that the question could be settled by examining a horse's mouth. This was done and the truth at once made clear.

This circumstance probably never happened, but it illustrates the lack of the scientific spirit that existed during the dark ages. In our day when any question of this kind arises, the first thought is to go directly to the source of information. If we want to know anything about an animal, we study the animal itself. If information is needed regarding a disease, the disease is given careful investigation.

At the close of the 15th century, Columbus had great difficulty to interest any one in fitting out an expedition to find a short cut to India. Every one seemed satisfied to let the great unknown take care of itself. To-day the keenest interest is shown in any new research. Wealthy men give fortunes, and scientists devote their lives to the work of discovery.

Importance of Research.—The discovery of new truth lies at the very foundation of human progress. If there were no expansion of knowledge, there would be a stagnation in the progress of civilization.

The researches of Pasteur in bacteriology and their application by Lister to surgery have absolutely transformed the methods of treating disease with a consequent saving of human life that can hardly be estimated.

Great industries like the manufacture of steel and its utilization for the welfare of man have been made possible through the untiring labors of science. In agriculture, research has made possible the control of pests that in earlier times well nigh caused famine over the entire land. Such conveniences as the steam and the gasoline engine, electric light and power, the telegraph and telephone, and numerous other utilities testify to the service rendered the world by the man of research.

The Man of Research.—Discovery is not so exclusive in her demands as to prevent any one from courting her. It is true that some are much better suited to make investigations than others; but any one who has power to observe closely and the honesty to record his observations correctly, may make progress in the study of nature and her laws.

Absolute honesty is probably the most important single requirement in the man of science. He who steals money takes a thing that is easily replaced. It often matters but little whether the thief or the real owner possesses it; but he who wilfully distorts an investigation and promulgates an untruth in science commits an offence against mankind that

should be given the highest condemnation. Not only are the money and time spent in the investigation wasted, but the discovery of the real truth may be greatly delayed.

An investigator should be industrious in order to get through with the great amount of routine incident to such work. He should have vision to see possibilities and imagination to project hypotheses in order to find clues on which to work. He must be able to analyze his data and to correlate facts, otherwise he may work on blindly without knowing what he is accomplishing.

Mechanical ability is of great advantage to one doing research, since new kinds of apparatus must often be devised and constructed. Difficulties are constantly arising that must be met. It is often just this ability to overcome the many obstacles that makes the difference between success and failure.

The man who does research work must have great patience and ability to stick at a task. The fact that a truth has not been discovered implies some difficulty, otherwise some one would have found it before. Nature will instruct those who study diligently, but she remains utterly silent to the man who is not willing to listen long and hard.

Preparing for Investigation.—The man who does research should be thoroughly prepared in order to do his work as effectively as possible. True, a number of men like Edison have made great records

without a wide training in science, but they were handicapped and often considerably delayed by their lack of information. In order to discover something new, a person should be familiar with what has already been discovered, otherwise he will spend his energies following in other men's steps.

During later years the investigations of science have advanced to such a stage that it requires considerable study in order to be prepared to do real research. In the days of Benjamin Franklin nothing at all was known about the properties of electricity; hence any simple studies he made contributed to the knowledge of man regarding this wonderful force, but now so many investigations have been made that a person must be well trained if he contributes anything new.

The inventor of a new mechanical device in the old days simply worked and tested in a haphazard manner till he succeeded in making his machine practical. To-day he saves much work and energy by his knowledge of physics and mechanics. Many men possessing real inventive genius never accomplish anything worth while simply because they lack the training. Their entire energies are used up testing principles that could be proved directly by mathematics and physics.

The preparation for research can best be obtained in one of the regular colleges. After a person has learned the fundamentals, he can consult with

his instructors regarding the special work to be done in the field of research he wishes to enter.

Opportunities for Investigation.—Never in the history of the world have conditions been so favorable for research in any line as they are to-day. Many of the fundamental laws of science have been discovered; the fruit that is easy to get has been picked, but often the best fruit is that growing out on the ends of the branches.

The agencies of research are usually connected with some public institution or some industrial enterprise. In the United States Department of Agriculture and the State Experiment Stations, thousands of men are constantly employed to investigate the laws underlying agriculture. Other government and state departments also maintain research staffs. Practically all of the universities of note in the country set aside funds for research. Many of the great industries have a force of trained experts who do nothing but make investigations relating to the industry.

The salaries paid for men to do research are often very high. Of course there are many well-trained assistants whose pay is moderate, but if they have the qualifications they can almost always work into a good position.

Most any man who has had a taste of real research likes it the best of any work he has ever done. The joy that comes as a result of discovering

some law after months or years of patient investigation cannot be realized except by those who have actually experienced it. Next to being an actual creator, probably the greatest work in the world is that of studying the works of the Creator of all good. The tracing of His handiwork throughout all the realm of nature is an occupation that gives unexpressible satisfaction.

CHAPTER XVII

JOURNALISM AND AUTHORSHIP

The Power of the Press.—This is a day of the newspaper. All people are not readers of books, but in civilized countries there are very few indeed who do not read the papers regularly. The country paper is probably the most potent factor in molding public opinion in rural districts, while the great city dailies have their influence the country over. That "the pen is mightier than the sword" has been recognized by such military leaders as Napoleon who would rather have an important newspaper on his side than an army of men.

Some papers adopt the policy of simply giving the news without color or comment, while others use the news as a means of reaching desired ends and of forwarding their purposes. Everything that goes into the paper is colored with the ideas of the management. The newspaper is used as an instrument of politics probably more than for any other single purpose.

The Function of a Newspaper.—"So common an object as a newspaper," says Dibble in his book

entitled "The Newspaper," "is seldom the subject of serious reflection. If any one of us should stop to consider what it is and why it is made, it is odd that he would think chiefly of one aspect of it to the general exclusion of the others. The curious man might reflect in surprise on the vast amount of mere reading matter turned out regularly every morning with perhaps only half a dozen literal mistakes, on the variety of typesetting and the amount of printing, often more than sufficient to make a large-sized book. The manufacturer would direct his imagination to the efficient machinery necessary to produce perhaps 3,000 copies a minute or to the practised organization, able to distribute them as fast as they are printed. The business man would think chiefly of a newspaper as a vehicle for prices and a medium for advertising. Cooks, butlers, clerks, and governesses look upon it as a daily registry office. The solicitor sells houses and lands through it. Housewives through it sometimes buy their soaps and more often their hats. Actors, singers, authors, artists, and musicians each read their special column and wonder when the editor intends to engage some one really acquainted with the only subject worth reading. The politician will read its leading articles with smirking assent or explosive repudiation. Last of all comes the general reader, and he asks nothing more of his newspaper than all the news of everywhere, collected at great

cost, transcribed with finished skill, and presented to him in just the way which pleases and flatters him most. All of them are not scrupulously satisfied."

The Newspaper Man.—"Newspaper reporting," says William Drysdale, "is an ever-open door for the young men who are fitted for it. Who are fitted for it, mark you; and it is the requisite of fitness that keeps the door constantly open. The thousands of newspapers require tens of thousands of reporters, and there is always a chance for good ones. But with equal certainty good ones must be ready to give way to better ones, and better to best. It is the best reporters only who can hope for permanent positions.

"In no other calling does a young man find his level so rapidly. In a month often, sometimes a week, a new reporter may be ranked among the dullards who do drudgery for small pay, or among the 'crack' men who do the best work and make more money than most of the editors. This possibility of immediate success is one of the great attractions of the work, almost as great as the opportunity to see life, to take part in passing events, to make the acquaintance of famous people.

"Many a new reporter has sprung at a bound to what seemed to be the very top of the ladder by writing unusually brilliant or witty articles, and at the end of a few weeks has been dropped incontinently because he was not trustworthy, because he

could not be depended upon. No brilliancy, no rapidity or activity on the part of a reporter can make up for want of integrity and care."

Charles A. Dana in his great lecture on "The Making of a Newspaper Man" gives the following advice to the young man beginning the business:

"1. Get the news, get all the news, and nothing but the news.

"2. Copy nothing from another publication without perfect credit.

"3. Never print an interview without the knowledge and consent of the party interviewed.

"4. Never print a paid advertisement as news matter. Let every advertisement appear as an advertisement; no sailing under false colors.

"5. Never attack the weak or defenceless, either by argument, by invective, or by ridicule, unless there is some absolute public necessity for so doing.

"6. Fight for your opinions, but do not believe them to contain the whole truth or the only truth.

"7. Support your party if you have one, but do not think that all the good men are in it or that all the bad ones outside of it.

"8. Above all, believe and know that humanity is advancing; that there is progress in human life and human affairs, and that as sure as God lives the future will be greater and better than the past or the present."

Opportunities in Journalism.—There are in the

United States over thirty thousand persons engaged in journalistic work, in addition to printers, lithographers, and pressmen, of which there are more than one hundred and fifty thousand. This number will probably continue to increase.

Newspaper work is strenuous and confining. There is no chance to shirk without being detected. One working on a newspaper has an excellent opportunity to mix in the activities of the community and to keep himself posted on local and national affairs. He must be a "live wire" or get out of the game.

If a man has a "nose for news" and likes the work, there is an opportunity for him to rise in the newspaper business just as fast as his ability increases. On a country paper, he must learn every phase of the work from the "printers' devil" to the editor. He should have experience in the mechanical, the news, and the editorial departments. The boy entering the printing department may, if he is ambitious, work up through the business and become editor or manager, or he may develop into an author. The work on a city paper is more specialized from the first. A young man may begin in one department and work on for years without learning much about the others.

There is a wonderful opportunity in journalistic work for a person to do a great deal of good. He can get a message before the public as in no other way. He is in a position to expose shams, and to

censure corrupt practise, and likewise to commend the good.

Authorship.—No young man who looks toward literature as a career need be discouraged by the great number of writers. If there are many writers, there are also many publishers and many readers. The opportunities have never been better than to-day for those who can write well.

Writing is not confined to the use of good English, although this is important. It is the message to be conveyed that counts. If a person has something to say to the public he should not hesitate on account of language, but should write it down in the best possible way; he can then correct till as many as possible of the imperfections are eliminated. After the first few attempts, composition will be much easier.

The young writer should not be discouraged if his manuscripts are rejected by the publishers. The best writers have had the same experience. Look through the rejected article or story to see where it could be improved and the next time profit by the mistakes.

It is a great pity that more young people do not write for publication. Many of them have talent that remains hidden forever because the possessors are over modest, or do not want to put forth the necessary effort. Even if one does not wish to make a business of literature, a little writing is a

great stimulator to one's mentality. Clear, accurate thinking is one of the results of composition. A good beginning can be made by contributing unpretentious articles to local papers and magazines, then as confidence is gained, more difficult literary tasks may be undertaken.

PART II

**RELATION OF THE YOUNG MAN
TO HIS WORK**

CHAPTER XVIII

CHOOSING A VOCATION

Stumbling into a Vocation.—One of the saddest things in the world is the sight of a young man wandering aimlessly through life with no definite occupation, hoping that some day he will stumble into a soft snap that will solve the question of making a living. The work he is doing came to him by chance and he will continue doing the same thing till chance turns him in some other direction. He is in no sense master of himself or of his destiny, but drifts about like a piece of bark tossed from wave to wave on the high seas. Man was placed on the earth to subdue it, and he should have sufficient force of character to determine what part he will play in the world's work. If he does not act for himself and develop initiative of his own, he is no better than the beasts of the field.

The misfits that are so common in the industrial world are usually due to the fact that sufficient attention was not given to the choice of a vocation. The reason men do not like to work is that they are not engaged in the right pursuit. A job was open to

them and they kept it as long as it would pay; then they drifted to something else.

The young man who would marry the first girl he happened to meet without giving the subject any thought would be considered very foolish indeed; yet the choice of an occupation by accident is let pass without the least notice, probably because it is so common.

Vocational Guidance.—At the age when a young man should choose a career, he has usually had but little experience and feels himself unable to make an intelligent choice. He probably has traveled but little, and his time has been spent doing only a few kinds of work. He very likely does not know much about the possibilities even of the work he is most familiar with. He must stand looking blankly into the future saying, "What shall I do, what shall I do?"

His ideas regarding various kinds of work are distorted. He fails to understand true values. The little, unimportant considerations may be all he can see. The opportunity of the commercial traveler to live on the train may attract a boy to that occupation, when in reality traveling is one of its greatest disadvantages. The white collar and clean hands of the bank clerk may appeal so strongly to the young man that any disadvantages of the work are entirely overlooked. It is, therefore, very desirable for young people to be guided and given help in their

choice of a vocation. This does not imply that the counselor should, without thought, dictate what occupation should be followed, or even that the parents without due consideration should say that one child should be a doctor, one a lawyer, one a teacher, and one a business man in order that all the professions would be represented in the family. Co-operation between the boy and those who would guide him is the only safe way. His likes and adaptation should be given full weight. Older persons can use various methods of studying these likes and adaptations and can also inform the boy on matters with which he is not acquainted. The young man is usually anxious to receive help in this way. He realizes that the way he gets started in life is important and he is ready for assistance.

The vocational guidance of the youth is one of the most important kinds of work that can be undertaken by any community. The welfare of the community in years to come will be affected by the choice of occupations of the young men who are at present growing up. When society comes to recognize this important truth, it will be considered almost criminal to allow a youth of promise to stumble into a vocation without receiving assistance from those prepared to give advice.

Broad Preliminary Training.—It is rarely possible for a boy at an early age to decide what line would be best for him to follow. He must, there-

fore, make his training so broad that it will be of service to him in any kind of work. Certain fundamentals in education are needed by every one, and these should be the branches that are given most study during the years of indecision. Even when one is pretty certain what profession he will adopt, he should not confine himself to studying it too early, or he is likely to be narrow in his outlook on life and lack the proper sympathy for the work of others.

Considerations That Count.—In looking over the various paths open to him, the young man should consider the big things that really count before making his decision. He and his work will be companions during his entire life, and he should be sure that it is the kind of companion that will be entirely agreeable. A young lady in selecting a husband, or a young man in selecting a wife, often decides on trivial matters to their great sorrow later. One girl confessed that the ability of a young man to dance well was what induced her to marry him. After marriage, she found that his dancing was not sufficient to make the home happy. The couple had nothing in common and divorce was the inevitable result. She had paid no attention to the real qualities of manhood and companionship, but had based everything on a trivial matter that could have little to do with their domestic happiness. Thus it is likely to be in the choice of a vocation unless great care is exercised.

A liking for the work is one of the most important considerations. If the actual work to be done is distasteful, it will be difficult to be entirely happy even though other things are favorable. On the other hand, if one enjoys every hour of his work, that fact will make up for many undesirable things about it.

While money should not be the chief thought, yet one makes a living through his vocation and he must engage in something that will pay. Probably the money side is more often overestimated than underestimated. Men can be induced to do most any kind of work provided they receive enough money.

The opportunities for advancement in a business are very important to the young man. A salary of eight hundred dollars with a chance to grow and the prospect of a steady raise would be better than a position paying a thousand dollars where there was no chance for advancement.

The effect of a vocation on the individual and his family is very often overlooked in choosing a life's work; yet this is probably the most far-reaching consideration. Many young men were induced to work in the Delamar mines in Nevada because the wages were high. It was known that the dust would injure their health. The high pay, however, was a greater temptation than they could resist. Practically every man who worked there for any length of time died early from the effects of the dust breathed. There

are a number of vocations that do not pay well in money, yet their effects on those working in them are favorable in a number of ways. These vocations should not be judged entirely from the wages they pay.

The Commonplace vs. the Spectacular.—There is a tendency for young people to look with favor on the spectacular and grand and to depreciate the ordinary things of life. It often takes years of experience in the world to realize that the commonplace, everyday things are the ones that are usually best, and that it is with them that most of us will have to deal.

Boys dream of becoming presidents, governors, senators, military leaders, or most anything that will bring them before the public gaze. In fact, there is a stage in most boys' lives when they think the brass band parade of the circus clown to be the most desirable of pursuits. Fortunately many of these ideas have been outgrown before young men have to choose their work.

Some would-be inspirers of the young seem to think their chief duty in life is to make young men dissatisfied with doing the common things. They would have a boy believe he is neglecting opportunities if he is satisfied to do farm work when he might wait on the table of a fashionable cafe where gay life can be seen and fine music heard. Some there are who would have the boy believe the chief thing

to be sought in life is to hold some high position, and that there is something dishonorable about being a private citizen.

I should like to teach with all my power the dignity of doing the common things of life uncommonly well. I should like to emphasize the honor of being a private citizen in any cause when that citizenship has honor reflected on it by the individual.

It is doubtful if the vocations connected with the spectacular are so desirable for the individual as those going with the commonplace. It is true that some one must follow the brass band in the circus parade, but the wise young man will not travel over the earth to find a circus to follow when there are many duties of the ordinary kind at home to be done.

The choosing of a vocation is no child's play; it should be done with all earnestness and with serious thought. It is one of the few very important decisions a young man has to make, since his entire life is usually affected by the choice.

Play the Game.—After having chosen a vocation every energy should be given to making it a success. The kind of work a person does is of less consequence than the way he does it. Success in a humble occupation is better than failure in the most exalted. One of the greatest compliments that can be paid a person is to say that he succeeded, and one of the worst things that can be said is that he failed.

Success means effort; "there is no excellence without labor." The keynote to success in any occupation is to learn it from the bottom to the top; then play the game for all it is worth.

CHAPTER XIX

TRAINING FOR A LIFE'S WORK

Different Requirements.—Each occupation requires its own special kind of training. There are a few general things a person must know and be able to do in order to succeed in any business; for example, reading, writing, and handling figures. Most people spend the greater part of their period of preparation in acquiring general knowledge that will be of equal value in any vocation. This is a day of specialization, however, and the industries are becoming more and more complex. They are demanding more than ever men who can do some particular thing especially well. This calls for a special training for each vocation.

The older schools and colleges worked on the theory that if a man had a fair knowledge of Greek and Latin and imbibed some of the culture of past ages, and if he was acquainted with the important theories of philosophy, he was prepared to meet the problems of the world and do its work. The mental culture he received was thought to give him power to cope with any emergency that might arise.

It is believed by many at the present, however, that the necessary culture may be obtained just as well in the study of something that is in itself useful. For example, learning the important facts about the soil will develop the mind as much as learning about the philosophy of Thales. The knowledge of the soil has the additional value of helping the prospective farmer to learn something important regarding his vocation.

Truth, be it ever so far removed from the practical, is well worth learning for its own sake; but where a young man has only a limited time in which to train for his life's work, he should not neglect the things that will be helpful to him in his particular calling.

The surgeon must have a thorough knowledge of anatomy as well as skill in handling the knife. The lawyer must know the statutes as well as be familiar with court proceedings. The farmer should know the laws governing the growth of crops as well as have ability to till the soil. The engineer must know the strength of materials as well as be able to draw intelligible plans. Thus, each profession has knowledge and training peculiar to itself. Many persons are trying to follow the various occupations without any particular training for them, but they are usually a menace to the profession and are unjust to themselves.

Thoroughness in Preparation Necessary.—There

is a constant temptation for the young man with limited means to rush into the practise of his profession with the minimum training. He sees an opening to begin and believes he can do the work, although he realizes that he is not thoroughly ready and that he should have more preparation. Such a person may succeed for a while, but there will come a time when he will strike bottom. He is brought forcibly to realize that his promotion is impossible, since he is not prepared to do the work at first undertaken.

The discovery of a person's inadequacy usually comes after it is too late to repair the loss. He either has a family to support or he feels too old to go back to the beginning. As a result, he must always be satisfied with a comparatively low place in his profession.

One great writer made the statement that it did not matter how late a person came into the world so long as he came well equipped. By this he meant that a little delay in beginnng active work did not matter if a person were only prepared to do the work properly when he began. Young men are usually restless to begin solving the real problems. A year to them is like an age and it sometimes seems impossible to spend an extra year in preparation. After they get older, however, they see that less haste would have been better.

Apprenticeships.—One of the favorite ways of

training boys in the trades has been by apprenticeships, especially in some of the countries of Europe. A young man was bound out to a master tradesman for a number of years, during which time he received very little money in return for his services, but was taught the trade or profession so that at the end of the apprenticeship he was prepared to do thorough work. This method was used particularly with such trades as carpentry, blacksmithing, and shoemaking. The same principle was also used in training doctors, lawyers, and other professional men.

This method has some advantages as well as disadvantages. It usually produced thoroughness, but was doubtless rather wasteful of time from the point of view of the young man.

Special School Training.—This is an age of schools. Never in the history of the world has there been so much money spent on school faculties and equipment as at present. Everything is done to give the student a maximum of training in the least time. If one would be a doctor or lawyer, he can find a school in almost every city where he can learn these things. If he wants to become a farmer or mechanic, he can in every state get good schools where these subjects are taught. The courses in these special schools are so arranged that a person can learn his business much sooner than under the old apprenticeship system. The schools usually emphasize principles and leave the person to get the applications

from practise afterwards. The schools are able to keep up to the latest thought on a subject much better than the individuals who take boys to train. In almost every vocation, it would be a good thing if the practitioners could have some special school training in the subject and not depend entirely on a general school education.

Preparation the Key to Opportunity.—Some one has said that preparation is the key that unlocks the door to opportunity. Experience certainly bears out the truth of this statement. The pessimist is likely to say that there are no opportunities these days and it is useless to put forth special effort. It can usually be depended on that if a person makes a statement of this kind he himself has spent but little time in preparation for anything.

History is full of examples of persons who have prepared themselves for a particular work, even though there seemed no chance for them to do the work. Their preparation has been the magic key that has unlocked the opportunity. Instead of there being no opportunity a person hardly has time to finish his training before calls come to him from every side to enter some door leading to success. The shiftless idler who spends his life looking for doors to open themselves, hoping that, perchance, he might slip in, is the one who complains that all the locks are rusty and the keys lost. The person who has taken the trouble to rustle a key hardly

extends his hand toward the lock before the door swings wide open for him to enter. The other fellow is taking a nap at such time so he rarely gets a chance to even look through the open door toward success.

This is an age offering wonderful advantages for a young man to acquire training in any walk of life. Let him choose almost any calling he will and he can, without any financial capital, prepare himself for important service in that calling. It requires energy and work to accomplish this, but surely it is worth while.

CHAPTER XX

THE GLORY OF WORK

Man Naturally Likes to Expend Energy.—The expending of energy constitutes one of the most fundamental traits of human character. A person wanting to be entirely idle all the time without exercising either mind or body would indeed be a curiosity fit to travel with a circus as a side-show attraction. From early infancy to old age the normal person is exerting himself during most of his waking hours. Some spend their energies doing useful work, while others dissipate their vitality in seeking pleasure. The best condition is between these extremes, with part work and part play. People who are overworked may think that a condition of absolute quiet is desirable. They fail to distinguish between well-earned rest and indolent ease. After a person has spent his energy, it is natural to rest and recuperate; but any attempt to get the pleasure derived from rest without earning it is an attempted short-cut which will lead to many troubles.

The young child almost as soon as it is born begins vigorous exercise which it seldom ceases. It keeps

hands, feet, and body constantly moving. Laziness is an acquired character which develops later in life to the great injury of the person affected by it.

Work Necessary to Health of Body.—Even though a person does not like to work, he must do so if he desires to keep his body in a healthy, vigorous condition. Man is so constituted that the regular bodily functions are performed much better if the body is active. Nearly every school and town has its gymnasium for the use of those who are engaged in sedentary employment. Here, well-arranged exercises are given in order that the various muscles will be brought into action. It is a common thing for those who are confined in close quarters to take a few weeks' vacation each year in order to give their bodies freer exercise. Burton says, "Idleness is the bane of body and mind, the nurse of naughtiness, the chief mother of all mischief, one of the seven deadly sins, the devil's cushion, his pillow and chief reposal. . . . An idle dog will be mangy; and how shall an idle person escape?"

Work Improves Condition of Mind.—If a person spends his time in complete idleness, he soon lapses into a state of mental indolence. The mind and body are intimately connected, and the condition of one influences the other. The mental faculties are most vigorous if both mind and body have something to do. The mind will not develop great strength if its thinking be haphazard and without system. It needs

definite tasks to perform and problems to solve if it is to get greatest growth.

When difficult mental work is to be done, there is often a tendency to slide around it in some easy way without going to the bottom; but if a person wishes his mental faculties to be strong, he must allow no flinching. He must make his mind move the load as he would expect his horse to do if there was a hard pull to be made. Smiles says, "Though the body may shirk labor, the brain is not idle. If it does not grow corn, it will grow thistles, which will be found springing up along the idle man's course in life. The ghosts of indolence rise up in the dark, ever stinging the recreant in the face, and tormenting him. True happiness is never found in torpor of the faculties, but in their action and useful employment. It is indolence that exhausts, not action, in which there is life, health, and pleasure."

Civilization Based on Work.—History is full of examples of what men have accomplished by being constantly industrious. It is safe to say that in all history we do not have any great accomplishment without work. The men who have shaped the political, industrial, and intellectual welfare of mankind, during all the ages, have been men who have devoted themselves consistently and industriously to the work they have had to do, often in the face of privation and want. Even Louis XIV said, "It is by toil that kings govern."

The great statesmen, writers, and scientists, who could be named by the score, almost without exception have been men who were noted for their industry. They have often been successful in business in addition to the work they have done in the field that has made them famous.

All Work Honorable.—A sentiment exists among some classes of people that only certain kinds of work are really fitting for them to do. They consider themselves superior beings who would be contaminated by the common work of the world and who must have some extraordinary kind of employment. They think their "higher culture" should demand a kid-glove job, where no great muscular strain is required. This is a mistaken idea. All work, so long as it is honest, is honorable. The better kind of culture is that which will train a person to do his work with pleasure and efficiency, rather than take him away from strenuous employment. It is said that rich parents seldom have sons who amount to anything. This is largely because of the attitude assumed by the children toward certain kinds of work. The parents usually gained their possessions by the greatest industry, but the children forget this, and have the idea that all hard work should be done by servants. They acquire the habit of dodging the real problems of life, the solution of which is so important in character-building. Wise parents, no matter how high their financial or social standing,

will impress upon their children a respect for every kind of honest work.

Work a Blessing, not a Curse.—People sometimes complain of the fact that there is work that must be done. They wonder why man has to keep busy from one year's end to another in order to get a living when it would be so much easier if he could only get along doing nothing. Such people have not made a very careful study of the nature of man. The Creator knew what he was doing when he made it necessary for people to earn their daily bread by toil. It is only by exertion and effort that development comes, and since development is one of the chief ends of life on the earth, the opportunity to do work is one of the greatest blessings in the possession of man.

Samuel Smiles says, "It is idleness that is the curse of man—not labor. Idleness eats the heart out of men as of nations, and consumes them as rust does iron. When Alexander conquered the Persians, and had an opportunity of observing their manners, he remarked that they did not seem conscious that there could be anything more servile than a life of pleasure, or more princely than a life of toil."

Lessing was so thoroughly converted to the value of effort that he said, "If the All-powerful Being, holding in one hand Truth, and in the other, the

search for truth, said to me, 'Choose,' I would answer him, 'O All-powerful, keep for thyself the Truth; but leave for me the search of it, which is better for me!' "

CHAPTER XXI

THE HABIT OF INDUSTRY

Industry Necessary to Accomplishment.—If a person desires to accomplish anything in the world he must keep himself constantly employed. Work will not do itself. Everything of value has its price, and the price of getting things done is to keep busy.

The work of some people resembles the pulling done by a balky horse. They give an occasional lunge into the collar between long periods of idleness. They may procrastinate for a week, then, when an industrious streak takes hold, they may work all day and night and injure themselves as a result. Such spasmodic outbursts never amount to much. The only way to really get work done is to keep constantly on the job day after day. An Indian may sometimes do twice as much as a white man, but the chances are he will take a vacation just when the work is most pressing.

It is not an uncommon thing to find a brilliant genius who is able, in some field, to do as much as two or three ordinary men. These geniuses, however, seldom reach abiding success, usually because

they fail to acquire the habit of industry. They depend on their talents to help them along and are irregular in their efforts. A combination of ability and industry in a person is a condition greatly to be desired, but moderate ability with great industry will usually accomplish more than greater ability applied irregularly.

The Use of Odd Moments.—It is by the strict use of odd moments that many of the men of eminence have been able to succeed. They have had their share of routine labor to perform, but by using every minute of time between other jobs, they have trained themselves for special usefulness among their fellows. One hardly realizes how much can be accomplished by using the little scraps of time that are usually wasted. The best way to use this time profitably is to plan work that can be picked up for a few minutes at a time. The little periods of waiting that one has every day, the time spent walking or riding from place to place, may be spent in reading, writing, and doing systematic thinking, or finishing odd jobs of work. Most people fail in this matter by not having things definitely planned ahead. When the five or ten minutes of leisure come, there is not time both to find a job and to do it, while if the job is already planned there may be time to finish it. Many of the best-read persons one meets have done practically all their reading at odd times when their associates have been idle.

Cultivating a Liking for Being Busy.—If a person does not like work nothing is more irksome than being compelled to labor. On the other hand, if one is naturally industrious he is happiest when busy. Since it is necessary for most people to work, they will spend life more profitably if their employment can be made a pleasure instead of a trial.

One of the chief ways of getting joy out of labor is to take an interest in it and to watch its results. This is often easier if a person is working for himself than for some one else, but one should interest himself in everything he does regardless of whom it is for. Those who consider their work as sheer drudgery usually have no interest outside of the check on pay day. On the other hand, nothing is more disagreeable to a man who enjoys his work than idleness, even for a short time. The habit of industry is easy to cultivate while young, but difficult to acquire after part of a life has been spent in idleness.

Doing vs. Being.—An idea exists among some classes of people that the chief aim in life is to "be some one," that is, to hold an important position. They seem to consider position to be the end to be sought when in reality it should be only an incident. The important thing is to accomplish something of value. Doing something is more important than being something. It is true that a position may give a person power to accomplish more than he other-

wise could, and where this is the case position may be a desirable thing to seek; but on the whole, people worry more about rising to eminence than they do about performing the duties of the desired position. If young men would give more attention to doing their own work well instead of looking with longing eyes at the man above them, the world's work would be done better and advancement would be more certain.

Contributions of the Industrious and the Idle to Society.—The idler contributes nothing to society; he is a mere parasite sapping the life's blood from the workers. If all the idlers could be removed from the earth, the rest of the people would have more comforts, and there would be greater opportunity for the education and improvement of society generally. On the other hand, each able-bodied worker, if industrious, can supply not only his own needs, but can add to the wealth and welfare of mankind. Each industrious man benefits society by his work, while every idler is a load retarding progress. In the interest of self protection society should do all it can to eliminate the idler and to foster the worker.

Idler Shall Not Eat the Bread of the Worker.—Modern society is becoming thoroughly imbued with the idea that "the idler shall not eat the bread of the laborer." Human drones are becoming less and less popular. It is used to be a boast among aristocratic people that they did not have to work, therefore

they did nothing. This, however, is an industrial age, and the value of a man is measured by what he can accomplish. It is no longer popular to be without a profession or an occupation.

Even where a young man inherits a sum of money sufficient to enable him to live in idle luxury the remainder of his days, there is no justification for idleness. His duty is to spend his energies to some useful end in order that the world will be better for his having lived. The man who spends his birthright without trying to develop it, can be compared to the servant who hid his lord's talent in the earth. He is a slothful servant unworthy the respect of his fellowmen. Young men who spend their valuable time loafing around street corners telling stories instead of doing some useful work usually get their just deserts, since they seldom reach any great financial prosperity and must be content to eat the scant morsel they earn.

CHAPTER XXII

DEVOTION TO A CALLING

Change of Vocation Undesirable.—It is a common saying that a rolling stone gathers no moss. The significance of this saying is that it is rarely profitable to change from one vocation to another. This does not mean that it is necessary to remain in a work for which one finds himself entirely unfitted, but the ceaseless shifting from one thing to another is usually bad. Capable men sometimes take up a line of work and plod along in it till they are in the wake of success, when they are suddenly seized by a desire to go into some other kind of business which must also be learned from the ground up. They find themselves fairly apt in the new work, but they rarely learn how to do it before they again shift. Their entire lives are spent changing vocations, and they do not make a success of anything. It is necessary to be deliberate in choosing a calling, but when the decision is once made, it is generally better to stay with the choice than to venture into some untried field. Many examples might be cited of men practically wasting their lives when they could have

attained eminent success in any one of the many fields of work tried by them. Demosthenes, the great Greek orator, had an impediment in his speech which, it seemed, would prevent him from ever becoming a public speaker. By persistent effort to overcome his handicap and to prepare himself, he became perhaps the greatest orator the world has ever known. Had he been discouraged after a year or two of failure and changed his work, it is probable the world would never have heard from him.

Edison, in perfecting some of his important inventions, met with many discouragements. He was not daunted, however, but continued on till success came.

A young man once started out to become a doctor. After studying medicine a year or two, he decided that the law suited him better. He was almost ready to practise law when he became interested in some mines, and turned his studies to mining engineering for a number of years. After losing some money in the mines, he concluded he wanted nothing to do with digging in the earth. He next turned his attention to merchandising, which was soon changed to the real estate business. This developed into handling farm lands, and after a time he had a number of farms on his hands which he could not dispose of, so he had to work them. He was thus forced by circumstances to settle down as a farmer. He was a man of exceptional ability and could have achieved

success in any one of the vocations he undertook, if he had only stayed with it; but his life was practically wasted learning a half dozen professions in none of which he succeeded.

Love for One's Work.—When a person is engaged in a particular kind of work, he should love it with all his heart. He should develop an interest in all its processes and study its various relations. If this is done, a liking for it cannot help but develop. It is sometimes necessary to take up a line of work that is naturally distasteful, but natural prejudice can often be largely overcome and its place taken by a distinct liking.

If a person is to be happy he must enjoy doing his work. He should be so interested in it that he feels glad to take it up each morning and reluctant to lay it down at night. He should have more satisfaction and contentment when engaged in his ordinary daily labor than when compelled to be away from it. At the end of a vacation, he should feel like going back to his work with a will rather than with complaint. A love for one's calling not only contributes greatly to the joy of living, but it is a large element of success in that calling.

Duties Connected With a Calling.—In every profession, there are some duties to perform that are not the most pleasant, but if a person is to be successful in his calling, he must not shun these disagreeable tasks. In undertaking a line of work, he

must make up his mind to do whatever comes in his way in the performance of his duties. Many fail because they flinch when the extra stress comes. They are good workers as long as nothing but pleasant work is to be done, but as soon as anything distasteful develops they are found lacking.

A doctor would be of little value if he would take only easy cases requiring no special effort, and refuse to treat a case that needed extra energy and self-denial. If a person decides to be a doctor, he should make up his mind that some of his cases will require his utmost skill and tax his endurance to the limit. The stockraiser must be willing to tend his animals in a blizzard as well as on pleasant days. Success in any business will depend on giving as much attention to its disagreeable phases as to the more pleasant ones.

Examples of Devotion to Calling.—Many examples could be taken from history and everyday life to show how people have been so devoted to their calling that it became almost a passion. Nehemiah, the prophet of old, became so interested in building the wall around Jerusalem that nothing could induce him to abandon the project. When Sanballat wanted him to leave his work and meet with the princess, he sent them a simple message saying: "I am doing a great work, so that I cannot come down." Nothing could persuade him to be away from his duty, even for a short time.

Agassiz, the great naturalist, is one of the best examples of devotion to the cause of science. He believed that tracing out the hand of God in nature was so important that he denied himself all kinds of personal comforts and pleasures in order to keep steadily at his work. When offered large sums of money to take up work foreign to his science, he promptly replied that he did not have time to make money. This devotion bore fruit in the large amount of scientific work actually done by him, and also in the inspiration which he gave to his pupils.

CHAPTER XXIII

ENTHUSIASM IN WORK

The Impetus of Enthusiasm.—Work done with enthusiasm receives an impetus that is impossible if done in a half-hearted manner. If a person is enthusiastic over the duties he has to perform, he is likely to be successful even in the face of great obstacles; but if he has no enthusiasm, small hindrances may cause failure. The teacher who does not care for his work and undertakes it with only part of his effort, is sure to be unsuccessful, regardless of his natural ability; while another teacher with less talent may succeed admirably by taking up his calling with all his heart and giving it his best energies.

One must become so saturated with his subject that he will fairly overflow with it; he must be so charged himself that he becomes a center of radiation if he expects to impress others. It is not necessary to carry enthusiasm into folly, and become unbalanced; but if anything of value is to be accomplished, something more than a mere passive attitude must be taken.

The great reformers in all ages have usually ac-

completed their ends more because of the conviction they have put into their efforts than because of any startling new ideas they have advanced. One who believes thoroughly in his work has a good start toward success. The enthusiasm that comes from a number of individuals working together for a cause often carries it to success, when an individual working alone with the same discouragements would be overcome. The great conflicts that have been waged by peoples for national independence have often succeeded more because of the spirit put into them than because of any great resources.

The Development of Enthusiasm.—There is a big difference in the attitude people assume toward their work. Some are strenuous in everything they undertake, while others are reserved and have the habit of attacking things with great deliberation. Those who naturally have a large degree of enthusiasm do not need especially to cultivate this virtue, while those who are lacking it should practise putting “ginger” into what they do and say. They should begin a campaign of converting themselves thoroughly to something, then try to impress it on others with all the strength they can command.

There may be a danger in working too hard for a thing before knowing whether it is proper or not; but the person who is forever holding back with the fear that he might by some hook or crook make a mistake will not accomplish much. Better make a

mistake once in a while and then correct it than go through life without doing anything at all. Enthusiasm is an asset, and as such should be cultivated.

Taking the Drudgery Out of Work.—Life, at best, has in it considerable of the unpleasant. The daily tasks one is called to perform are likely at times to become irksome. There is in all work sufficient of routine that it sometimes is monotonous; and it is important that this drudgery and monotony be reduced as much as possible, in order that the pleasant part of life will be the maximum, and the disagreeable the minimum.

There is no better way of enjoying one's work than by being enthusiastic over it. Something in this attitude makes one cease to be annoyed by little things that would otherwise discourage. Interest is turned toward the results of labor instead of being diverted by every little unpleasant detail that is encountered. Drudgery is largely an attitude of mind. Any activity may become irksome, if considered in that light; on the other hand, the most diligent application to one's duties may be a pleasure, if one has the proper attitude toward one's work. One of the chief aims of modern industrial education is to give the student an enthusiasm for the common tasks of life that will enable the world's work to be done without drudgery.

Infusing Industry Into Others.—We are all affected by those around us and we, to an extent, par-

take of their attitude and spirit. If they are dissatisfied, it is possible that dissatisfaction will annoy us; while, if they are joyful, our lives will be given additional joy. This influence of one person on another is perhaps as strong in the attitude toward work as in anything.

Every person who takes up his work with a will and carries it on vigorously makes those associating with him get something of his spirit. In factories where a number of people are working together, speeders are sometimes employed at an extra cost. They work very rapidly and their example stimulates the rest to greater effort. A person who is enthusiastic over his work is a benefit to any community, since other people become imbued with the same spirit, and the work of the community will be more efficient.

CHAPTER XXIV

EFFICIENCY IN WORK

Kinds of Efficiency.—There are a number of ways of considering efficiency in work. One is to take the individual as a standard and make his production the maximum, using for his assistance every device and mechanical aid possible. This maximum work of the individual would usually be sought where human labor is scarce and other things plentiful. Another way of considering efficiency is to get the greatest production for some piece of equipment, regardless of the human effort spent. This condition would be desired with a very expensive or rare piece of machinery where operating labor is cheap.

Under other conditions, the greatest production for a given time is desired, regardless of labor and equipment. The construction of the Panama Canal comes in this list, for great speed in finishing the work was more desired than economy. Under this condition, the efficiency of an engineer would be determined as much by the tons of earth removed in a month as by the cost of each ton. In agriculture, a common measure of efficiency is the yield of crops

to the acre of land. According to this standard, the Chinese are very efficient farmers. The more modern standard of efficiency in farming is to take the individual as the unit and strive to get the maximum returns for each farmer rather than for each acre of land. By this latter method of considering the question, China is a land of low efficiency, agriculturally, for, while the land yields heavy crops, each farmer makes but little money.

Thus in considering efficiency we must state what we wish to be efficient in production, whether the individual, the equipment, or the land. Since, in this discussion, we are most interested in the individual, we shall consider, particularly, the things that will aid him in doing his work.

Need of Efficiency.—This is an age when every process is being studied in detail by scientific methods to eliminate every possible source of waste, whether in human labor or in material wealth. Since competition is keen, it is important that every effort count to the utmost, for those who spend half their energies doing things by poor methods cannot hope to compete with those who are more forceful.

For the good of society, it is necessary that all work be done just as effectively as possible. If a man can, by using a particular method or a machine, till twice as many acres of land, or make twice as many shoes as by doing it some other way, it is important that he select the better way, in order that

he might produce more wealth for the world during his life. It is good for the individual as well as for mankind generally to make his work count, and he enjoys at least part of the reward of increased production.

If a person has a fixed amount of work to do, he should devise every means possible to accomplish his task quickly and well. This will enable him to have more time for educational pursuits and for recreation. The old idea entertained by some people, that the doing of every task needs a certain amount of drudgery which cannot and should not be lessened, is inconsistent with modern methods of thought and the development of modern times. The whole trend of present-day education is toward economy of effort, and, when this bears fruit, it is to be hoped that there will be more records of efficient lives.

Plan Time.—One of the chief ways of increasing efficiency is to thoroughly plan one's time. So many people simply work. They begin in the morning and stop at night. They have done what has presented itself, rather than arrange the tasks for each hour. They are slaves of their time rather than masters of it. Such people never have time to do anything; they are always busy, but the amount of real work accomplished by them is usually small. The old maxim which says: "If you want a piece of work done quickly, choose some one to do it who already

has many burdens," contains considerable truth. Such persons usually have their time well planned and they can find odd moments here and there for extra duties.

It is really remarkable how much more can be done if every minute of the day is planned in the morning before work is begun, than if the day is spent just doing the things that present themselves. The president of one of the largest insurance companies in America had a clerk who did nothing but plan his employer's time. Because the time of this official was so valuable that not a minute was to be wasted, the clerk had every moment definitely scheduled.

Busy-bodies often complain that they do not have time to plan; but it is, in reality, great economy to cease work long enough to make a schedule of the working hours. Such a course is particularly valuable to students. They usually do best work if they have a well-arranged plan allowing proper time for recreation and rest as well as for work. In any field it is not always possible to live rigidly up to a schedule; a plan is just as valuable if flexible enough to take care of emergencies.

Organizing Activities.—Going hand-in-hand with the planning of time is the organization of one's activities; indeed, these two cannot be separated. In arranging the daily, monthly, or yearly program, care should be taken to make the various jobs fit well into each other so that the greatest efficiency

will be realized. There are many kinds of work that can be done together, if care is taken in arranging them. The housewife who cooks but one thing at a time, when she might be watching everything necessary for a dinner, would be considered very incompetent; and yet some men do not exercise much better judgment in doing their work. Farmers often make three or four separate trips to town for things which could have been procured all at once if planning had been done ahead. Every business has its little pieces of work that can be done together or made to follow each other effectively. These should be studied with the view of economy of time and effort.

Mechanical Aids to Efficiency.—Man is so much the master of the world and his time is so precious that he should bring to his aid every possible mechanical device and implement. If he wishes to travel he should have the means of going from place to place as rapidly as safety will permit so that valuable time will not be wasted. If he wishes to move mountains or dig in the earth, he should have the best tools that can possibly be obtained, and if he wishes to till the earth or harvest his crops, he should have those devices that will enable him to do it in the best manner. If there is anything that will aid the man doing office work, it should be employed just as far as economy will justify.

The development of certain machinery has met

much opposition on the part of the working classes who thought they would be thrown out of employment. Such a short-sighted policy might seem proper as a temporary expedient; but society cannot afford to let such a policy prevail. If work can be done cheaper and better by machine than by hand, the machine should be allowed to do it and some other kind of work found for the people. The man of the future who is wise enough to desire his life to be spent as efficiently as possible will plan his time and work thoroughly, and will use every means at his command to promote effectiveness.

CHAPTER XXV

QUALITIES OF GOOD WORK

Must be Honest.—Honesty, of all qualities in man is probably most to be admired. A dishonest person, though he possessed every other known virtue, would fall short of being worthy the respect of his fellows. Honesty in work is just as important as in a person; the two go together. If a person is entirely conscientious about what he does, his defects in other respects may be overlooked, as the employer knows what he can expect and can make allowance. A tricky worker, no matter how brilliant he may be, is only half a man, since complete dependence cannot be put in him.

A person taking up any employment should resolve to give it his full time according to whatever contract has been made. There is a tendency, especially with cheap labor, to do as little as possible for the money. A boss is necessary to see that time is not wasted. Usually a person does not get a raise in wages till after he has earned it; hence those who are dishonest in the service they render, generally, remain on the low wage list for a long time, and

they curse their employer for what is really their own fault. Merit does not continue long unrewarded. So in work as well as in other things, "honesty is the best policy."

The young man who wishes to meet life squarely will not be honest in his work simply as a matter of policy for which he would be rewarded; but will give the full measure of his energies to his work because it is right to do so and because he does not want something for nothing.

Must Be Accurate.—This is a day which demands great accuracy. Machinery of precision which will do its work with the greatest exactness has been developed. Even in calculating, man has brought to his aid mechanical devices at great expense in order to overcome his inaccuracies.

Accuracy is largely a habit of mind and can be cultivated. Some people are naturally precise and do things properly, while others have to watch themselves continually to avoid mistakes. It is a good habit not to let a piece of work go out of one's hands till it has been checked over so that all possible sources of error are eliminated. If this is done a person will discover where he is wrong in time to correct himself.

In the field of business where large transactions are involved, a mistake of a few cents may finally count up into thousands of dollars. In science, little errors in observation or calculation have often led

to wrong deductions which have greatly retarded the discovery of a truth. Every person, whether he is working for himself or for some one else, should constantly be on his guard to develop greater accuracy.

Must Be Rapid.—The affairs of mankind are moving at a more rapid pace than ever before. The means of locomotion and communication have been absolutely revolutionized in a generation. Distances which required months to cover previously are now traversed in a few days. A message can now be sent to the ends of the earth in a few minutes, whereas, it used to require years to accomplish the same end. In order to keep pace with the times, it is necessary for people to think and act quickly.

This is a day of keen competition in every field, and the man who can do the greatest amount of work in a day can do it cheapest, thereby outdoing his competitors. After a person is honest in his efforts, and learns how to do a thing accurately, he should then strive for speed, but should not sacrifice honesty and accuracy for rapidity. Speed in most work can be acquired by constant practise. The muscles can be trained to do things many times as fast after practise as at first. The skill of some factory hands, in doing a special task quickly, is almost a marvel. The mind, as well as the body, can be trained to great activity and speed; and if a person wants to make his life efficient, he should

train both body and mind to do all their work with dispatch.

Must Be Up-to-date.—Work, to be of the best quality, should be up-to-date, embracing all the world knows about it. Many men have become first-class workmen as apprentices when young, but have not kept pace with the advancement of the world, since their methods have become so antiquated as to be almost useless. The merchant or banker must study the signs of the times and adopt new business methods as they are developed or he cannot compete.

The farmer who follows the methods of his great grandfather and pays no attention to the new developments in scientific agriculture is standing in his own light. Never before have there been such great advances in learning and invention as at the present which makes it necessary in every field to keep one's hands on the pulse of progress. The wise young man, as he takes up the duties of life, will hold himself open to any new light that will help him in his work. If he takes this attitude it will be easy for him to keep up-to-date in his methods.

Dependable vs. Non-dependable Work.—The quality of work a person can do is of little importance if he cannot be depended on. A master mechanic was at one time employed to work for a company that said they could well afford to pay him \$20 a day if he could only be depended on every day. About every so often he would become drunken and

lay off a week when he was most needed. As a result, he received only \$2.50 a day and he would have been turned out entirely if his place could have been filled by some one else.

Not only is it important that a person can be depended on to be at his post whenever needed, but the quality of his work must be reliable. The world is willing to pay for goods that can be thoroughly guaranteed, and it is just as willing to put a premium on work that is dependable. It is much better to have it said of a person that he *will* do the work than that he *can* do it. An employer is usually willing to sacrifice something in ability for the sake of getting some one who is thoroughly reliable.

Work Should Be Unselfish.—The selfish man appeals to others as being a dry, warped, malformed semblance of a real man; just as a wrinkled, shriveled, partly-decayed potato has some of the characteristics of the fresh, crisp tuber. Strip a person of his interest in others, and he soon withers in mind and soul. First the purse-strings bind; then the heart-strings. There is no room in his mind for wants of widows and orphans; they must give him his dues to the uttermost farthing. Even in the business world, selfishness does not pay. Men can no longer allow themselves to become mere leeches. Open-handed dealings pay as advertisements. A few years ago a well-to-do merchant gave a hundred tons of coal to the poor widows of a certain city. When

questioned, he explained that he knew of no way of using five hundred dollars to bring him a greater amount of business. School buildings and other public improvements are often assisted by wise and liberal men of wealth. Should greed cause a man to be dishonest, or even what some term "shady," he will soon, in all probability, and surely in the end, lose by it.

Only when a person forgets himself in the interest of others can he really do the most good. He who constantly seeks reward for every task, and honor for every deed performed, will seldom get the respect he would desire. This is but natural, as to do one's work, one must be absorbed in the labor and not in the reward. Each person has all he can possibly do to keep his plans free from entanglement and his energies unencumbered. Let him detract from his strength by projecting a future of renown, and he must fall short of his possibilities because of failure to concentrate in either quality or quantity of effort. Take for example, the baseball player who "grandstands," his faulty playing usually shows that he is more interested in the applause than in the game.

There is something about one who seeks personal glory that weakens his influence. We seem to feel his lack of sincerity and unconsciously scorn him. On the contrary, we cannot help but admire and respect true unselfishness, be it ever so humble.

CHAPTER XXVI

NEED OF AVOCATIONS AND RECREATION

What an Avocation Is.—The average work-a-day person follows some general occupation, the income from which furnishes him with the necessary means to support himself and family. This is a vocation. There may be certain seasons of the year when the work slackens or discontinues for a time, as with the farmer or teacher. There may be a portion of the day unoccupied. Employment among young lawyers and physicians may be very irregular. It is possible that some work may be fitted into idle hours or seasons, which, though not replacing the occupation, may be made to supplement it. Teachers canvass, sell life insurance, farm, work at resorts, etc., during vacations. Our most successful farmers feed stock, keep a dairy herd, and manufacture some product during the winter months. One lawyer built a shop and installed an engine with which he did odd machine and carpenter work and ground grain. It was commonly said that he earned more "on the side" than from his law business. Some one in every town must write for newspapers. One man in a small

community earns twenty to forty dollars every month by sending in news and society items. Some business men in suburbs and in rural districts make poultry or hogs pay. These extra sources of employment and income, which are carried only as the occupation permits, are called avocations. One man's vocation may be another's avocation. Generally the income from one's avocation is not so important to him as that from his vocation. Dairy cows may pay only for their keep and yet be profitable to the general farmer. Manifestly this would not suffice for the dairyman; they must furnish him his living above costs.

Avocations may not yield any income at all; they may satisfy only some whim or fancy. Some rich people maintain a farm at a loss in order to employ their young people and have a country home. Canvassing furnishes a chance for one to travel and pay a portion or all of his expenses. This appeals to a teacher on a vacation, but not to a regular salesman; the business must pay him or he leaves it.

Desirable Types of Avocation.—First, an avocation must fit into the periods of regular employment when work slackens or discontinues. Farming may be a desirable avocation for one with a long summer vacation; it would not be for one who has vacations at irregular intervals or during the winter. A farmer could not well make tending a resort an avocation because both demand greatest amount of work in

summer. He could, however, bale hay for his neighbors or keep beef steers and hogs. A banker could not be a surveyor, at odd times, as his periods of leisure would not fit. He might be able to tend a garden or play in an orchestra quite handily.

It is desirable to have the avocation differ from the vocation sufficiently to give some of the physical and mental rest which comes from a change in work. It would not, however, be wise for him to attempt anything so widely variant as to incapacitate him for usual activities. Pruning an orchard in the home garden is likely to be more congenial to the office clerk than carrying brick or mixing mortar. It would be grossly foolish for a doctor to attempt to run a greenhouse alone. While upon some extended call every plant in the hotbed would probably be ruined. The nature of the avocation should be such that its product will not be destroyed by the periods of employment in the vocation. An author might successfully operate a hothouse if interested and working at home.

Lastly, some avocations develop and even supplant regular work. Mr. Roosevelt for example did some writing all during his career as police commissioner and office-holder. Later he did routine work on a national magazine. It is far-sighted to develop a slow growing skill, step by step, until it is strong enough to become of support as well as a power in the nation.

Need of Play and Rest.—We all tire. The farmer plods the plow furrow, tramps hay, or pulls weeds until to drag one foot after another tires his very soul. The office hand sits and writes or computes figure after figure, under high nervous tension, until he feels as if he could fly. The schoolboy digs out lesson and problem; a few hours finds him also ready to rest. Even musicians and lecturers may use up nature's ready supply of energy and need quiet.

A considerable part of one's rest is taken in sleep. A large part of our rest will be obtained at play. Play is simply a pastime engaged in for the sake of the activity. After delving all day into knotty problems with all one's power concentrated upon the outcome, how free one feels when he may jump and frolic as a child. Sometimes in the middle of a task, a person becomes so fatigued that he weakens; then he needs to be re-created—to play. Why not? Ten minutes in a good brisk walk, a game on the lawn, a good laugh, a phone call home, a visit if possible, or a ripe apple and a cup of water in the shade, really makes one over again. Rests pay; they clear for action; they let us wipe the mist from the spectacles of our souls; they do re-create.

Desirable Types of Recreation.—The most desirable kind of recreation varies, of course, with people and work. The man who carries brick all day needs a different form of play than the banker. The old proverb which says, "all work and no play makes

Jack a dull boy," is very true. Stand a moment upon the street corner and watch the people go by. See this man: his face is drawn and the shoulders stoop. He needs a rant on the floor with Molly and Charlie. Now what does this little girl need? Oh, a lawn, some dishes, and a rowdy brother. The romp makes you smile all over, especially if it be a vigorous one with children. With children, for they have no axes to grind and you fear no trap. They play in a whole-souled manner. That's what you need, you people tired of too much getting and spending. Take half an hour and you'll have brighter eyes, keener brains, and lighter limbs with which to face the day. How different you feel after giving Teddy a ride on your back and Helen one on your toe.

Following the period devoted to play, some profitable employment of leisure time naturally comes. One may read either poetry, fiction, or science—some of each is perhaps best. Who is not better able to meet the tasks of the day with "The Recessional," "The Lost Chord," "On the Road to Mandalay," or any of a thousand poems at his tongue's end to drive off spells of private choler. Music with some people supplants reading. To mount pictures, do fancy work, roam the fields and foot-hills, visit, drive, or ride, care for a pet, etc., all have their devotees. Any one is good; a combination of several, better.

Proper Combining of Work and Play.—It has

already been noted that play must not impede our work, but accelerate it—not add to the burden, but drive off all the useless cares and let the mind and body recuperate. Playing is required by every one. Rest, also essential, need not come in idleness, but in some pleasure-giving and profit-bearing activity. Sleep following play and recreation is likely to be undisturbed.

During the Civil War, in the midst of the most trying periods of planning and anxiety, relief came to President Lincoln in a funny story. His cabinet officers thought him frivolous to laugh at such times. A bow that is always strung, loses its spring.

Again play and work do not mix. Let one cease before the other begins. It has been noted that only absolute concentration will enable a person to do his best work. When at play no worry of the day's trial must linger. Play, to be play, must be untrammelled. Regular play strengthens as do regular work, regular meals, and regular sleep. People may play between times, but not during them.

“Work while you work, and play while you play;
That is the way to be cheerful and gay.”

CHAPTER XXVII

COOPERATIVE WORK

Man Cannot Always Work Alone.—No person is entirely independent in his life, but he is in some way connected with the rest of mankind; his labor is dependent on theirs, and his welfare is helped or hindered by society. On the other hand, the efforts of every person have their influence on others. Even Robinson Crusoe isolated on an island was indebted to others for what he learned before being shipwrecked, as these things were a help to him in his solitary life.

Most of the occupations of man involve a complex system of interlocking work. A person may direct others, and at the same time be responsible to some one himself. Even in such very independent callings as tilling the soil, the farmer must in some respects cooperate with others. Indeed, cooperation among farmers is now becoming a very popular subject for books and special articles. There can be cooperation in purchasing and marketing, in the use of animals and equipment, in combating pests, in se-

curing advice, in irrigation and drainage systems, the use of help, and in almost every phase of the business. In the great industries, requiring the use of much labor, there is a constant union of forces. One man working alone could accomplish little toward operating a railroad or a factory. As a rule, schools, mercantile houses, banks, etc., have a corps of hands each contributing his share toward the success of the institution, but these industries are sometimes conducted on a small scale by a single individual. Even where this is the case there must be cooperation between the operator and those with whom he has to deal. Thus the affairs of life involve constant cooperation, and if a person wishes to get along well, he should learn to fit into the system.

Reasons for Cooperation.—Men in all ages have realized that it is often advantageous to work together. Where one man did not have large enough flocks or herds to justify the entire time of a herder, he joined his neighbors, and together they were able to employ a man and a saving resulted to each. This principle holds in most of the business affairs of life. It is not possible for each family to have its individual water and sewer system, or electric light plant, hence people have cooperated to install these conveniences. It has not been thought desirable for each person to be his own defense against criminals; hence society has banded itself together into municipi-

palities and governments for mutual protection and benefit.

Cooperation allows much greater specialization than if everything were attempted by each individual. One man can raise crops, another handle the commerce, another look after the transportation; each man can do that for which he is best suited. No two persons have the same capabilities. One likes sedentary employment, while another prefers to be engaged in active outdoor work. By cooperation it is much easier for individuals to do the work they like, and are best suited to do, than if a system of strict individualism were practised.

The old saying that in union there is strength is very true in many of the industries. If only a limited amount of capital were available it would be impossible to install the expensive equipment necessary to do certain kinds of work efficiently. It is possible for the single farmer on his kitchen stove to condense the milk produced by his cows, but he cannot do it without much waste of time and fuel, and it is impossible for him to make a uniform commercial product. When a great many farmers join together and each supplies milk to a common condensed milk factory, modern machinery can be used and expert workers employed. This makes possible great economy in operation as well as insuring a marketable product that can be depended upon.

The great advantages that are to be derived from

cooperation are rapidly making this an age when much of the business is controlled by corporations. Nor are all the advantages of cooperation confined to business; they extend to all the walks of life. Education and religious work are benefited by the use of cooperative methods.

Doing Good Team Work.—When a number of persons are working together there is a temptation to do star-performing at the expense of the rest of the team. This is often seen in athletics, but a person is not a good man on an athletic team till he learns to sacrifice himself when it is necessary for the good of the team. A player often has an opportunity to make a good record as an individual when by so doing his team would be injured. There is a temptation to gain the glory for himself, but if he has been well trained and has a keen sense of honor, he will be willing to sacrifice himself for the good of the cause he represents.

Every person is not able to work well in an organization where his effort is but one of the cogs in a great wheel. Many are not able to subject themselves to the regularity and routine necessary for such work. There are many fine oarsmen who are of little value on a rowing team where regular concerted work is necessary.

All who have driven horses know how important it is to get the animals to pull together if the load is stuck in a mud hole. In teams that are not well

trained, or if the driver does not know his business, one horse lunges ahead with all his strength and the other is pulled back against the wheel. This one in turn may then pull his best, but by that time the first one has ceased. Two horses pulling steadily together will move a larger load than four that are pulling on the see-saw. If a person wants his life to be spent efficiently, he should learn to do work in a team as well as singly.

Cooperation in the Family.—The family is one of the places where cooperation can be done most effectively. If there is a perfect understanding between husband and wife in all they do, their efforts will count for much more than if there is discord. In some families, the father will set up one standard for the children to follow and the mother will oppose it and help the children to disobey the father. Where this condition is found, the children usually do not obey either parent, and all the instruction and training are lost.

In some families the parents work at cross purposes in regard to financial matters; one is saving and careful, while the other is extravagant and wasteful. This condition leads to very much unpleasantness.

It is much better for the parents to be united, even on an imperfect policy, than to be divided under any circumstances. The children of a family can be of great service to each other if only the spirit

of cooperation exists among them. They can help one another in acquiring an education or attaining any useful end; they can also be of mutual assistance in business enterprises. A very successful way is for father and sons to work together in developing some project. The father can give the necessary sound judgment based upon years of experience; while the sons can furnish the enthusiasm and energy necessary to carry on the business in an up-to-date manner.

Cooperation in the Community.—Community cooperation is a theme that has been much discussed of late years, and it has probably not received more attention than its importance justifies. The ways in which the various individuals can help each other and the community are many; the injury that can be done by a neighbor is also great. Cooperative industries are usually successful if given full support, but are doomed to failure when opposed by a large part of the community. Such industries as creameries, cheese factories, canneries, sugar factories, and all manner of manufacturing plants, should be of general interest. The people of a particular district by working together may make it famous for a certain product, and that product be of much greater value under such a condition than if produced only in small quantities in the region. Buyers go to France from all parts of the world to get Percheron horses, just as they go to the Jersey

Islands for milch cows. If many people in a region are engaged in the same industry, it is easy to get skilled help in that industry, since most of the population are acquainted with it.

The individuals of a town or city should cooperate with each other in securing the best possible civic conditions. The education and moral tone of a community can easily be kept up to a high standard if all the members work together to that end, while a few individuals can accomplish but little. In smaller towns, family feuds or cliques often prevent cooperation. Where this narrow-minded condition is allowed to exist, progress is always slow. People should learn to forget personal differences for the sake of community advancement.

CHAPTER XXVIII

SUCCESS IN LIFE'S WORK

Standards of Success.—There are almost as many standards of success in life as individuals in the world. These may be placed in various groups, but the individuals of a group will differ greatly. One group will affirm that success should be measured by the amount of this world's goods a man is able to accumulate; another, that if a person has been able to hold a place of high social standing, he has received the best life could offer. Some think the chief thing to be sought in life is fame, that a name can be handed down to receive honor from future generations. Many believe success to be very closely connected with rearing a family in honor; while others consider the matter purely from a personal standpoint, thinking that if they as individuals have lived a pious life they are entitled to the reward for a life well spent.

One should avoid taking too narrow a view of success, as it certainly does not consist of any single one of the above conditions. One man, putting his

thumbs in the arm holes of his vest, said with considerable pride, "I am a man who has made a success in life. My family has never wanted for a dollar, and I can now die leaving them all comfortable." True, he had made money, but his life was far from successful, measured by most standards. He had contributed nothing to mankind, and had not really been good to his family, for, as soon as his death occurred, his children soon squandered what was left them. As they had never learned industry, they became parasites on society, some being great burdens, since they often came in conflict with the law.

A true standard of success should embrace things of intrinsic rather than conventional value, and would probably include the points discussed below.

Personal Development.—Any standard of success that does not include personal development is faulty. A person does not live for himself alone, but if he has not been developed during his life, that life has been a failure. The surest way to develop one's self is to assist others, so if no development has been received it is fairly certain that but little good has been done.

Some people complain that their occupation does not allow them to develop. While this may be true to a limited extent, no kind of work can hold a man down, if he has the determination to learn and advance. A person does not develop to full stature in a day, but it takes a lifetime of constant effort.

He must use odd moments when the majority of people are idle.

“The heights that great men reached and kept,
Were not attained by sudden flight;
But they, while their companions slept,
Were toiling upward in the night.”

With some kinds of work it is difficult to get much intellectual development without toiling at night, often when rest is needed; but intellectual training is not the only thing to be desired. Everything that is praiseworthy or of good repute should be sought, whether it is in method of doing common things or learning about the extraordinary. The entire man—head, heart, and hand—should be made better each day, if he is to claim that his life has been fully successful.

Contributions to the Vocation.—It is impossible to get anything out of the world without putting something into it; nor should a person require his profession to do all for him without in turn contributing something to it. If a person has practised a profession or been in a business all his life, he should have discovered something new about that business or profession. When such a discovery is made, it is his duty to make the fact known, in order that it can be useful to others.

A doctor constantly treating different cases gets a

great experience with disease during his life of practice, and it is his duty to leave the science of medicine any new facts he may have learned. The farmer, after raising potatoes and corn for many years, should have discovered some facts of value to later generations of farmers. Fortunately, during late years each line of work or profession is getting technical journals where the new facts of that special field can be recorded. This makes it much easier for a person to be of service to his vocation than when such information could be printed only at great expense. A person may be modest about forcing his ideas on others, but he should not withhold any information that can be used to aid his profession. An example that will be remembered almost with reverence is of the doctors who allowed their lives to be sacrificed to demonstrate how yellow fever is transmitted.

Contribution to Mankind.—A person's chief interest should be in his fellowmen. It should be his greatest pleasure to do them service; indeed, man is so constituted that he is happiest when helping some one. The person who is entirely selfish in his actions and does things solely for his own benefit never gets much real joy out of life.

Young men in planning their careers are sometimes so short-sighted that they consider nothing but their own selfish welfare. More experience would teach them that such a course is folly. A wise young

man, before he chooses his work for life, will not only consider what he can get out of it, but he will also consider what he can give that will be of benefit to others.

The ways in which a person can benefit mankind are almost infinite. He may help people in a material way by developing industries, by devising a better method of doing something, or by contributing directly to a worthy cause. He may help his fellows by always living an exemplary life, and thus making it easier for others to do likewise. He can always throw his influence on the side of right when occasion permits, and thus be a strength for good in the community where he lives.

Many men have built up great fortunes, but in so doing have degraded hundreds of their fellow creatures. Such a person could not be considered successful in life.

History contains thousands of examples of men who have devoted themselves during their entire lives to the service of their fellowmen and their lives are considered by most people to be highly successful, although they rarely attained worldly wealth.

James Henry Leigh Hunt, in his poem entitled "Abou Ben Adhem," shows the real place the love of mankind should occupy:

Abou Ben Adhem (may his tribe increase),
Awoke one night from a deep dream of peace,

And saw—within the moonlight in his room,
Making it rich and like a lily in bloom—
An angel writing in a book of gold.

Exceeding peace had made Ben Adhem bold,
And to the presence in the room he said,
“What writest thou?”—The vision raised its head,
And, with a look made all of sweet accord,
Answered, “The names of those who love the Lord.”
“And is mine one?” said Abou. “Nay, not so,”
Replied the angel. Abou spoke more low,
But cheerily still, and said, “I pray thee, then,
Write me as one who loves his fellow men.”

The angel wrote and vanished. The next night
He came again with a great wakening light,
And showed the names whom love of God had
blessed,
And lo! Ben Adhem's name led all the rest.

Joy and Happiness in Work.—“Man is that he might have joy” is one way of looking at the purpose of human existence. Joy does not mean temporary pleasure but that fuller happiness that comes as a result of life well spent. If at the end of life one felt nothing but regret, if sorrow and unhappiness had been his constant portion, it would hardly be consistent to say that his life had been entirely successful.

A certain kind of sorrow comes into the life of every one which is caused by the loss of dear ones or by unavoidable misfortunes; but this sorrow does not necessarily lessen the joys that should fill a person's days. In fact, joy and sorrow are often very closely connected. Tennyson, who was made very sad by the loss of his friend, Arthur Henry Hallam, still felt that his life was enriched by having met his friend and he voiced the idea by saying:

"I hold it true whate'er befall;
I feel it, when I sorrow most;
'Tis better to have loved and lost,
Than never to have loved at all."

There is a joy that should come as a result of accomplishment; there should be happiness resulting from the association with friends and loved ones; and all along the path of life a person should get satisfaction. Wealth and social standing without happiness are of little value, and a person cannot claim to have had complete success in life unless he has had a good measure of joy, even though he be the owner of a city.

Actual Accomplishments.—It is probable that one of the very best measures of success in life is actual accomplishment. Some men are fortunate in that their efforts have been productive, and they have a long list of deeds to their credit; while others who

have worked equally hard have but little to show for their labors. The difference may be due to management or it may be attributed to a chain of unavoidable misfortunes. The world to-day does not want excuses, but it wants results. It is not so much interested in what a man might have done if things had been different, as in what he actually did. They want the "message to be delivered to Garcia," and will allow the messenger to pass the camps of the enemy as best he can. The important thing is for him to overcome all difficulties and deliver the message in safety.

The little boy who had been fishing, when asked by his mother regarding his success, said he almost caught twenty-five. He had but one fish, however, on his stick, and it was this fish—not the twenty-five—that contributed to the family dinner. If a person has spent his earnings in extravagant living and has dissipated his energies in useless pleasures, it is little comfort at the close of his life to look back and say that such and such might have been accomplished had a different course been taken. The following quotation from Maud Muller emphasizes this fact:

"Of all sad words of tongue or pen,
The saddest are these, 'It might have been.' "

A person who has been successful in his life's work will be developed physically, mentally, and spiritu-

ally; will have been of value to his profession and to mankind; will have tasted happiness; and as he surveys his life, he will see the practical, tangible results of his efforts. He will have known more of good than of bad, more of joy than of sorrow; and the world will be better for his having lived.

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